

INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.
CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.



INSTALLATION AND OPERATION INSTRUCTIONS

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS: ANSI Z21.88 • CSA 2.33 FOR VENTED GAS FIREPLACE HEATERS.

GDS26N
NATURAL GAS

GDS26P
PROPANE

Castlemore™

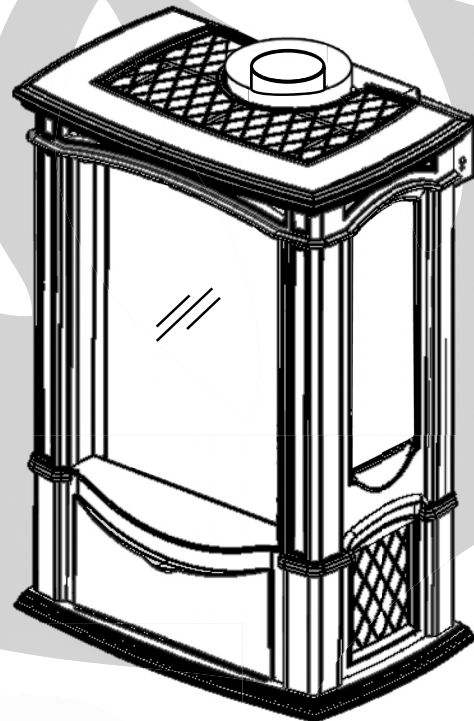
CERTIFIED FOR CANADA AND UNITED STATES USING ANSI / CSA METHODS.

SAFETY INFORMATION

! WARNING

WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS:**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the supplier.



APPLY SERIAL NUMBER LABEL FROM CARTON



Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON L4M 4Y8 Canada • (705)721-1212 • fax(705)722-6031
www.napoleonfireplaces.com • ask@napoleon.on.ca

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RETAIN THIS MANUAL FOR FUTURE REFERENCE

WARNING

- Do not burn wood or other materials in this stove.
- Adults and especially children should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Supervise young children when they are in the same room as the stove.
- Clothing or other flammable material should not be placed on or near the stove.
- Due to high temperatures, the stove should be located out of traffic and away from furniture and draperies.
- Ensure you have incorporated adequate safety measure to protect infants/toddlers from touching hot surfaces.
- Even after the stove is out, the glass and/or screen will remain hot for an extended period of time.
- Check with your local hearth specialty dealer for safety screens and hearth guards to protect children from hot surfaces. These screens and guards must be fastened to the floor.
- Any safety screen or guard removed for servicing must be replaced prior to operating the stove.
- It is imperative that the control compartments, burners and circulating blower and its passageway in the stove and venting system are kept clean. The stove and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The stove area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.
- Under no circumstances should this stove be modified.
- This stove must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this stove if any part has been under water. Immediately call a qualified service technician to inspect the stove and to replace any part of the control system and any gas control which has been under water.
- Do not operate the stove with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- Do not strike or slam shut the stove glass door.
- This stove uses and requires a fast acting thermocouple. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.
- Pressure relief doors must be kept closed while the stove is operating to prevent exhaust fumes containing carbon monoxide, from entering into the home. Temperatures of the exhaust escaping through these openings can also cause the surrounding combustible materials to overheat and catch fire.
- Only doors / optional fronts certified with the unit are to be installed on the appliance.

NAPOLEON® products are manufactured under the strict Standard of the world recognized ISO 9001 : 2000 Quality Assurance Certificate.

NAPOLEON® products are designed with superior components and materials, assembled by trained craftsmen who take great pride in their work. The burner and valve assembly are leak and test-fired at a quality test station. The complete stove is test-fired and thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from NAPOLEON®.

NAPOLEON® GAS STOVE PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new NAPOLEON® gas stove are warranted against defects for as long as you own the stove. This covers: combustion chamber, heat exchanger, stainless steel burner, phazer™ logs and embers, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enamelled components and aluminium extrusion trims.

Electrical (110V and millivolt) components and wearable parts such as blowers, gas valves, thermal switch, switches, wiring, remote controls, ignitor, gasketing, and pilot assembly are covered and NAPOLEON® will provide replacement parts free of charge during the first year of the limited warranty. Light bulbs are not covered by this warranty.

Labour related to warranty repair is covered free of charge during the first year. Repair work however, requires the prior approval of an authorized company official. Labour costs to the account of Napoleon® are based on a predetermined rate schedule and any repair work must be done through an authorized Napoleon® dealer.

CONDITIONS AND LIMITATIONS

NAPOLEON® warrants its products against manufacturing defects to the original purchaser only -- i.e., the individual or legal entity (registered customer) whose name appears on the warranty registration card filed with NAPOLEON® -- provided that the purchase was made through an authorized NAPOLEON® dealer and is subject to the following conditions and limitations:

This factory warranty is nontransferable and may not be extended whatsoever by any of our representatives.

The gas stove must be installed by a licensed, authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes.

This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect and parts installed from other manufacturers will nullify this warranty.

This limited warranty further does not cover any scratches, dents, corrosion or discolouring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, mechanical breakage of PHAZER™ logs and embers, nor any venting components used in the installation of the stove.

NAPOLEON® warrants its stainless steel burners against defects in workmanship and material for life, subject to the following conditions: During the first 10 years NAPOLEON® will replace or repair the defective parts at our option free of charge. From 10 years to life, NAPOLEON® will provide replacement burners at 50% of the current retail price.

In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, with respect to this President's Limited Lifetime Warranty, NAPOLEON® may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective part(s).

After the first year, NAPOLEON® will not be responsible for installation, labour or any other costs or expenses related to the reinstallation of a warranted part, and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in this President's Limited Lifetime Warranty, NAPOLEON®'S responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of NAPOLEON® with respect to the NAPOLEON® gas stove and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

NAPOLEON® neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. NAPOLEON® will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust fans, furnaces, clothes dryers, etc.

Any damages to stove, combustion chamber, heat exchanger, brass trim or other component due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of NAPOLEON®.

The bill of sale or copy will be required together with a serial number and a model number when making any warranty claims from your authorized dealer. The warranty registration card must be returned within fourteen days to register the warranty.

GENERAL INSTRUCTIONS

THIS GAS STOVE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. Installation practices vary from region to region and it is important to know the specifics that apply to your area, for example: in Massachusetts State:

- The stove damper must be removed or welded in the open position prior to installation of a stove insert or gas log.
- A carbon monoxide detector is required in all rooms containing gas fired appliances.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct vent sealed combustion product.
- **WARNING:** This product must be installed by a licensed plumber or gas fitter when installed within the commonwealth of Massachusetts.

In absence of local codes, install to the current CAN1-B149 Installation Code in Canada or to the National Fuel Gas Code, ANSI Z223.1, and NFPA 54 in the United States. Mobile home installation must conform with local codes. In the absence of local codes, install to the current standard for gas equipped mobile housing CAN/CSA Z240 MH Series in Canada or the manufactured home construction and safety standard, Title 24 CFR, part 3280, or the Fire Safety Criteria for manufactured home installations, Sites and Community Standard ANSI/NFPA 501A in the United States.

Objects placed in front of the stove must be kept a minimum of 48" away from the front face of the unit.

The stove and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psig (3.5 kPa). The stove must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5 kPa).

The stove, when installed with a blower, must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States.



We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS STOVE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!

Minimum inlet gas supply pressure is 4.5 inches water column for natural gas and 11 inches water column for propane. Maximum inlet gas pressure is 7 inches water column for natural gas and 13 inches water column for propane. When the valve is set to "HI", the manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10 inches water column for propane. When the stove is installed at elevations above 4,500ft, and in the absence of specific recommendations from the local authority having jurisdiction, the certified high altitude input rating shall be reduced at the rate of 4% for each additional 1,000ft.

Expansion / contraction noises during heating up and cooling down cycles are normal and to be expected.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Maximum input is 25,000 BTU/hr for natural gas and propane. Maximum output is 20,500 BTU/hr at an efficiency of 82%.

Provide adequate accessibility clearance for servicing and operating the stove.

Never obstruct the front opening of the stove.

Provided that the clearance to combustibles are achieved, the most desirable and beneficial location for a Napoleon® stove is in the centre of a building, thereby allowing the most efficient use of the heat created. The location of windows, doors and the traffic flow in the room where the stove is to be located should be considered. If possible, you should choose a location where the vent will pass through the house without cutting a floor or roof joist.

Rating Label Location: The rating label is located behind the control door and is chained to the stove.

DO NOT REMOVE.

CARE OF GLASS AND PLATED PARTS

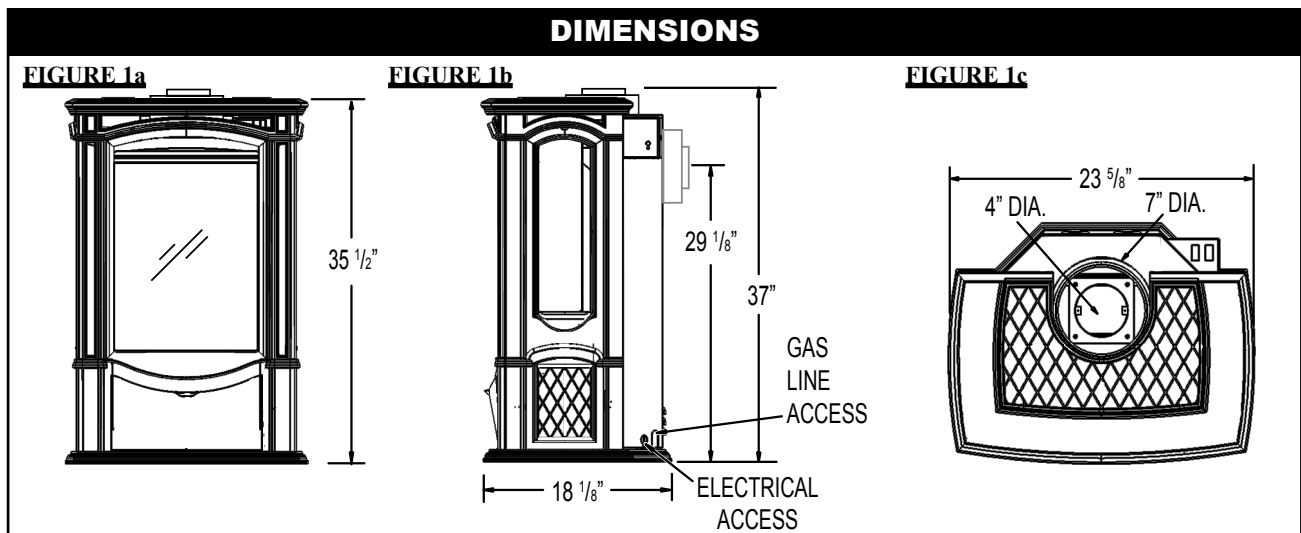
Do not use abrasive cleaners to clean these parts. Buff lightly with a clean dry cloth.

The glass is 3/16" ceramic glass available from your Napoleon® / Wolf Steel Ltd. dealer. **DO NOT SUBSTITUTE MATERIALS.** Clean the glass after the first 10 hours of operation with a recommended gas stove glass cleaner. Thereafter clean as required. **DO NOT CLEAN GLASS WHEN HOT!** If the glass is not kept clean permanent discoloration and / or blemishes may result.

! WARNING



HOT GLASS WILL CAUSE BURNS.
DO NOT TOUCH GLASS UNTIL COOLED.
NEVER ALLOW CHILDREN TO TOUCH GLASS.



VENTING

VENTING LENGTHS AND AIR TERMINAL LOCATIONS

Use only Wolf Steel, Simpson Dura-Vent, Selkirk Direct Temp or American Metal Amerivent venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, Selkirk Direct Temp and American Metal Amerivent, follow the installation procedure provided with the venting components.

All outer pipe joints of these venting systems must be sealed using Red RTV High Temperature Sealant.

The connection between the adaptor for these systems and the stove flue collar must be sealed using the black high temperature sealant Mill Pac (not supplied).

A starter adaptor must be used with the following vent systems and may be purchased from the corresponding supplier:

PART	4"/7"	SUPPLIER
Duravent	GDS924N	Wolf Steel
Amerivent	4DSCB-N1	American Metal
Direct Temp	4DT-AAN	Selkirk

For Simpson Dura-Vent, Selkirk Direct Temp and American Metal Amerivent, follow the installation procedure found on the website for your venting supplier:

VENTING SUPPLIER	WEBSITE ADDRESS
Simpson Dura-Vent	www.duravent.com
Selkirk Direct Temp	www.selkirkcorp.com
American Metal Amerivent	www.americanmetalproducts.com

For vent systems that provide seals on the inner exhaust flue, only the outer air intake joints must be sealed using a red high temperature silicone (RTV). This same sealant

may be used on both the inner exhaust and the outer intake vent pipe joints of all other approved vent systems except for the exhaust vent pipe connection to the stove flue collar which must be sealed using the black high temperature sealant Mill Pac.

When using Wolf Steel venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: Wall Terminal Kit **GD222**, or 1/12 to 7/12 Pitch Roof Terminal Kit **GD110**, 8/12 to 12/12 Roof Terminal Kit **GD111**, Flat Roof Terminal Kit **GD112** or Periscope Kit **GD201** (for wall penetration below grade). Also approved for use with Duravent's co-axial to co-linear adaptor for installations using an existing chimney.

The maximum allowable vertical vent length is 40 feet, the minimum allowable vertical vent length is 3 feet.

For optimum flame appearance and stove performance, keep the vent length and number of elbows to a minimum. The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.

Horizontal runs may have a 0" rise per foot in all cases using Wolf Steel, Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent rigid venting components or Wolf Steel flexible venting components.

For optimum performance, it is recommended that horizontal runs have a minimum 1" rise per foot when using Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent or Wolf Steel rigid / flexible vent components.

Wolf Steel, Simpson Dura-vent, Selkirk Direct Temp, and American Metal Amerivent venting systems must not be combined.

VENT INSTALLATIONS

For safe and proper operation of the stove follow the venting instruction exactly.

Deviation from the minimum or the maximum vertical vent length can create difficulty in burner start-up and/or carboning.

Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition.

Vent lengths that pass through unheated spaces (attics, garages, crawl spaces) should be insulated with the insulation wrapped in a protective sleeve to minimize condensation.

Use a firestop, vent pipe shield or attic insulation shield when penetrating interior walls, floor or ceiling.

FOR SPECIFIC VENTING PARAMETERS, REFER TO PAGES 9-13.

HORIZONTAL VENT SECTIONS: A minimum clearance of 1" at the bottom and sides and 2" at the top of the vent pipe in all horizontal runs to combustibles is required. Use firestop spacer W010-1313 and shield W585-0240 (supplied).

VERTICAL VENT SECTIONS: A minimum of 1" all around the vent pipe on all vertical runs to combustibles is required. Use firestop spacer W010-1313 (supplied).

TYPICAL VENT INSTALLATIONS

REAR EXIT

FIGURE 2a

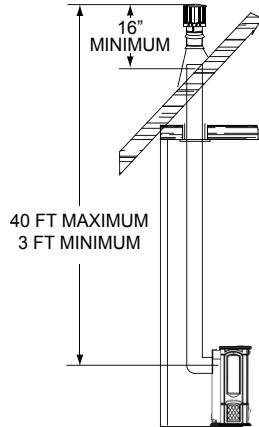
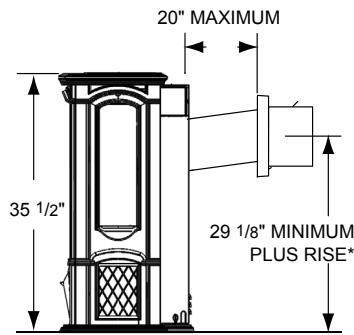


FIGURE 2b



TOP EXIT

FIGURE 3a

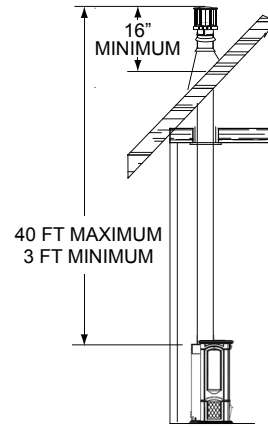
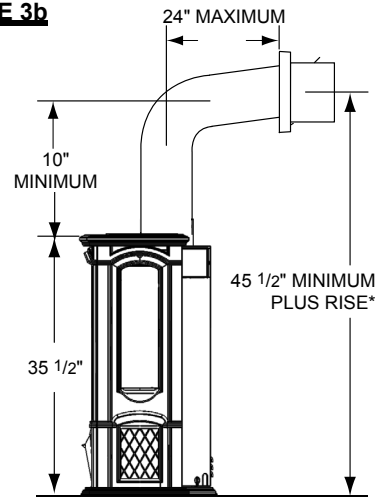


FIGURE 3b



* Refer to "Venting" Section

SPECIAL VENT INSTALLATIONS

PERISCOPE TERMINATION

Use the GD201 periscope kit to locate the air termination above grade. The periscope must be installed so that when final grading is completed, the bottom air slot is located a minimum of 12 inches above grade. The maximum allowable vent length is 10 ft.

FIGURE 4a

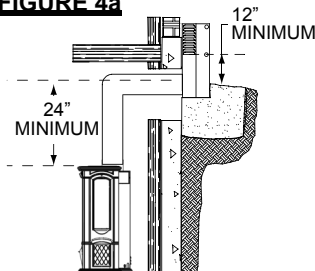
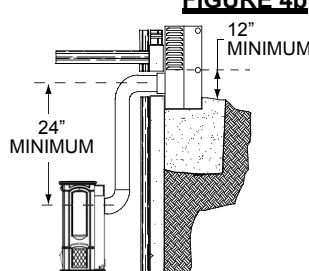


FIGURE 4b



MAXIMUM 10FT VENT LENGTH

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CORNER TERMINATION

The maximum vent length for a corner installation is 20" of horizontal run, in addition to the 45° offset. In this case zero rise is acceptable. See FIGURE 5a. It is recommended to maintain a 6" rise. See FIGURE 5b.

FIGURE 5a

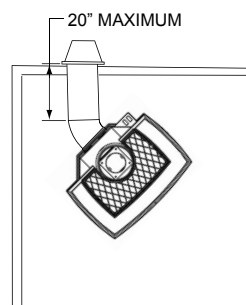
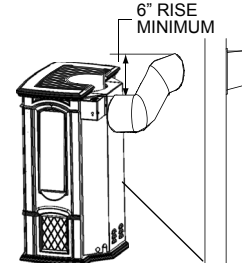
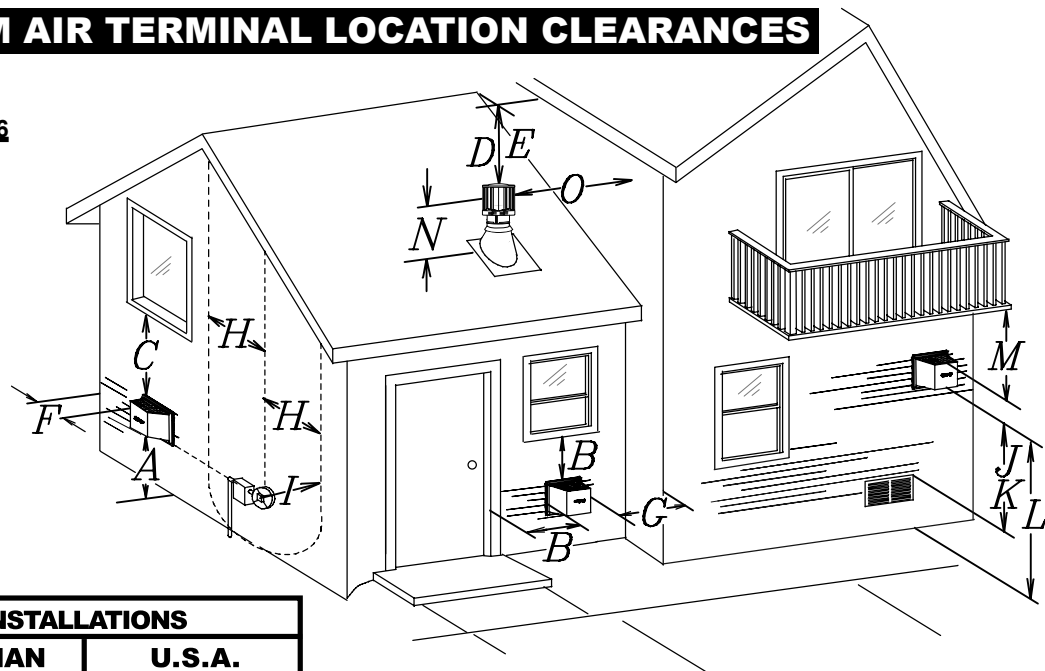


FIGURE 5b



MINIMUM AIR TERMINAL LOCATION CLEARANCES

FIGURE 6



INSTALLATIONS			
CANADIAN	U.S.A.		
A	12 INCHES	12 INCHES	Clearance above grade, veranda porch, deck or balcony.
B	12 INCHES	9 INCHES	Clearance to windows or doors that open.
C	12 INCHES*	12 INCHES*	Clearance to permanently closed windows.
D	18 INCHES**	18 INCHES**	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the centerline of the terminal.
E	18 INCHES**	18 INCHES**	Clearance to unventilated soffit.
F	0 INCHES	0 INCHES	Clearance to an outside corner wall.
G	0 INCHES***	0 INCHES***	Clearance to an inside <i>non</i> -combustible corner wall or protruding <i>non</i> -combustible obstructions (chimney, etc.).
	2 INCHES***	2 INCHES***	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.).
H	3 FEET	3 FEET****	Clearance to each side of the centerline extended above the meter / regulator assembly to a maximum vertical distance of 15ft.
I	3 FEET	3 FEET****	Clearance to a service regulator vent outlet.
J	12 INCHES	9 INCHES	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
K	6 FEET	3 FEET†	Clearance to a mechanical air supply inlet.
L	7 FEET‡	7 FEET****	Clearance above a paved sidewalk or paved driveway located on public property unless fitted with a heat shield kit GD-301.
M	12 INCHES††	12 INCHES****	Clearance under a veranda, porch, deck or balcony.
N	16 INCHES	16 INCHES	Clearance above the roof.
O	2 FEET†*	2 FEET†*	Clearance from an adjacent wall including neighbouring buildings.

* Recommended to prevent condensation on windows and thermal breakage

** It is recommended to use a heat shield and to maximize the distance to vinyl clad soffits.

*** The periscope GD-201 requires a minimum 18 inches clearance from an inside corner.

**** This is a recommended distance. For additional requirements check local codes.

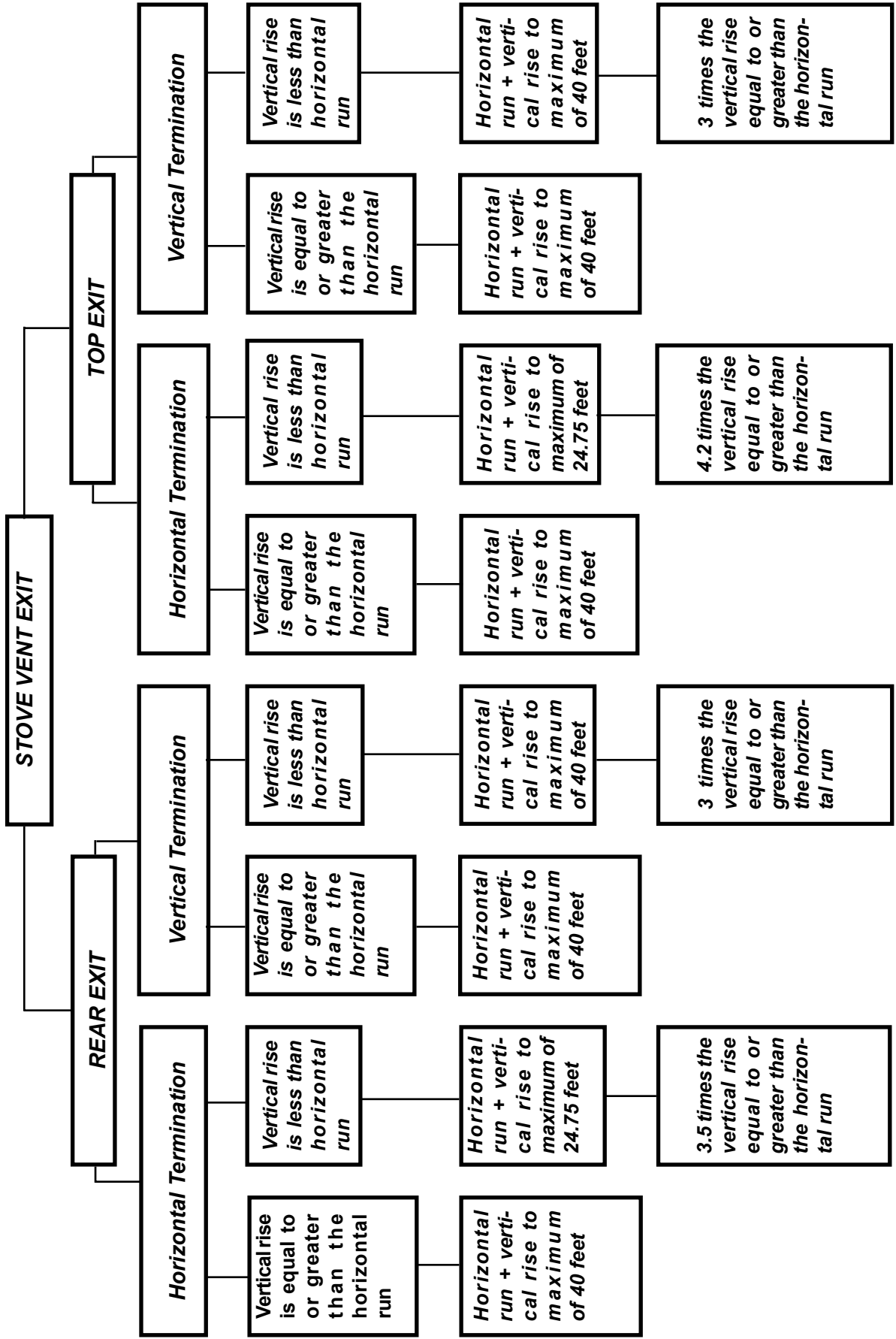
† 3 feet above if within 10 feet horizontally.

‡ A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

†† Permitted only if the veranda, porch, or deck is fully open on a minimum of two sides beneath the floor.

†* Recommended to prevent recirculation of exhaust products. For additional requirements check local codes.

VENTING APPLICATION FLOW CHART



DEFINITIONS	
for the following symbols used in the venting calculations and examples are:	
>	- greater than
≥	- equal to or greater than
<	- less than
≤	- equal to or less than
H_T	- total of both horizontal vent lengths (H_R) and offsets (H_O) in feet
H_R	- combined horizontal vent lengths in feet
H_O	- offset factor: .03(total degrees of offset - 90°*) in feet
V_T	- combined vertical vent lengths in feet

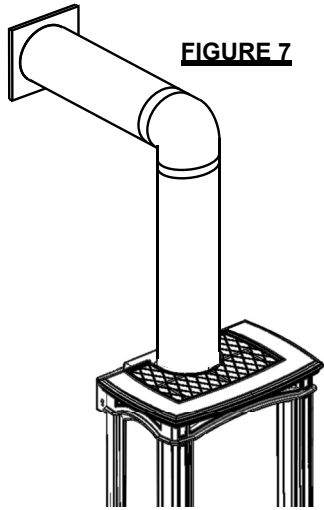
ELBOW VENT LENGTH VALUES		
	feet	inches
1°	0.03	0.5
15°	0.45	6.0
30°	0.9	11.0
45°	1.35	16.0
90°*	2.7	32.0

* the first 90° offset has a zero value and is shown in the formula as -90°

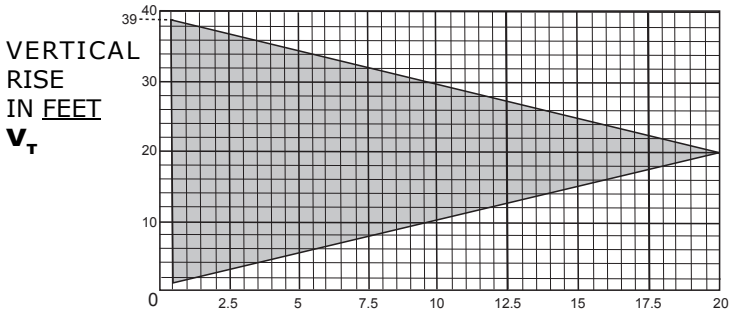
TOP EXIT / HORIZONTAL TERMINATION

$(H_T) \leq (V_T)$

Simple venting configuration (only one 90° elbow)



See graph to determine the required vertical rise V_T for the required horizontal run H_T .



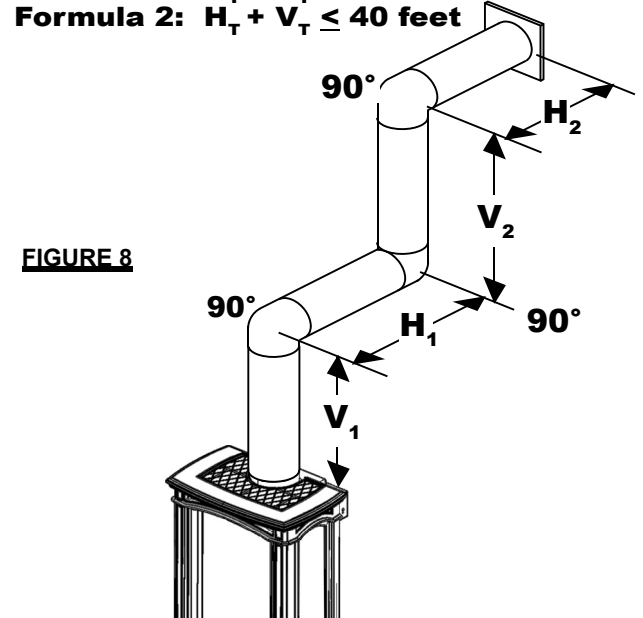
HORIZONTAL VENT RUN PLUS OFFSET IN FEET H_T

The shaded area within the lines represents acceptable values for H_T and V_T .

For vent configurations requiring more than one 90° elbow, the following formulas apply:

Formula 1: $H_T \leq V_T$

Formula 2: $H_T + V_T \leq 40$ feet



Example 1:

- $V_1 = 3$ ft
- $V_2 = 8$ ft
- $V_T = V_1 + V_2 = 3 + 8 = 11$ ft
- $H_1 = 2.5$ ft
- $H_2 = 2$ ft
- $H_R = H_1 + H_2 = 2.5 + 2 = 4.5$ ft
- $H_O = .03(\text{three } 90^\circ \text{ elbows} - 90^\circ) = .03(270^\circ - 90^\circ) = 5.4$ ft
- $H_T = H_R + H_O = 4.5 + 5.4 = 9.9$ ft

$H_T + V_T = 9.9 + 11 = 20.9$ ft

Formula 1: $H_T \leq V_T$
 $9.9 \leq 11$

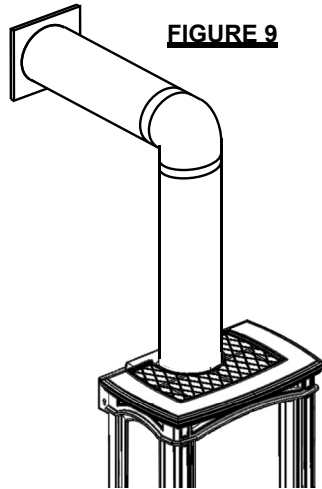
Formula 2: $H_T + V_T \leq 40$ feet
 $20.9 \leq 40$

Since both formulas are met, this vent configuration is acceptable.

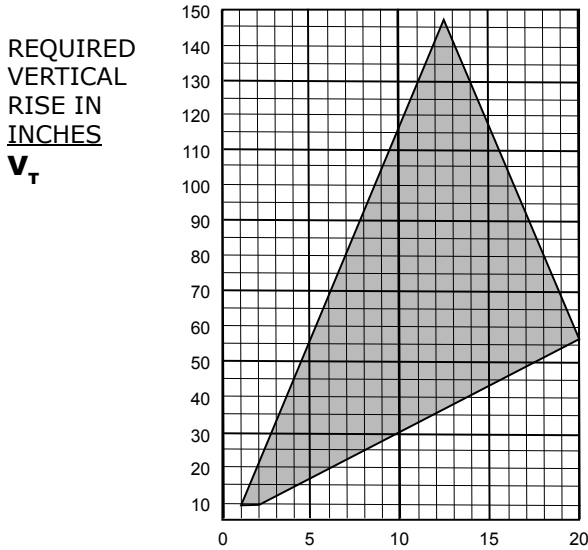
TOP EXIT / HORIZONTAL TERMINATION

$(H_T) > (V_T)$

Simple venting configuration
(only one 90° elbow)



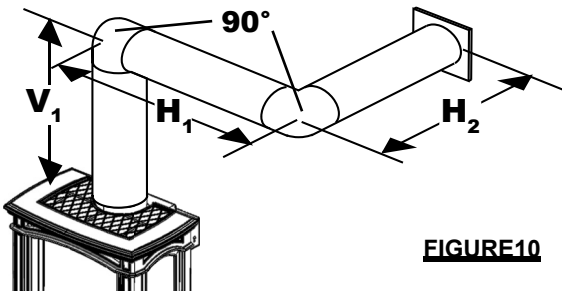
See graph to determine the required vertical rise V_T for the required horizontal run H_T .



HORIZONTAL VENT RUN PLUS OFFSET IN FEET H_T
The shaded area within the lines represents acceptable values for H_T and V_T .

For vent configurations requiring more than one 90° elbow the following formulas apply:

- Formula 1:** $H_T \leq 4.2 V_T$
- Formula 2:** $H_T + V_T \leq 24.75$ feet



Example 2:

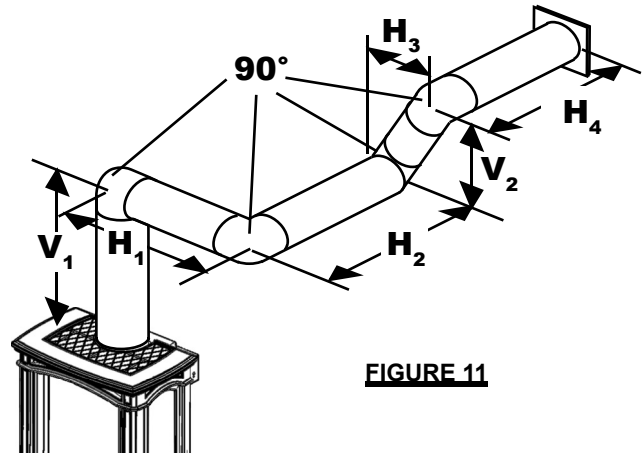
$$\begin{aligned} V_1 &= V_T = 6 \text{ ft} \\ H_1 &= 3 \text{ ft} \\ H_2 &= 5 \text{ ft} \\ H_R &= H_1 + H_2 = 3 + 5 = 8 \text{ ft} \\ H_O &= .03(\text{two } 90^\circ \text{ elbows} - 90^\circ) = .03(180^\circ - 90^\circ) = 2.7 \text{ ft} \\ H_T &= H_R + H_O = 8 + 2.7 = 10.7 \text{ ft} \\ H_T + V_T &= 10.7 + 6 = 16.7 \end{aligned}$$

Formula 1: $H_T \leq 4.2 V_T$
 $4.2 V_T = 4.2 \times 6 = 25.2$
 $10.7 \leq 25.2$

Formula 2: $H_T + V_T \leq 24.75$ feet
 $16.7 \leq 24.75$

Since both formulas are met, this vent configuration is acceptable.

Example 3:



$$\begin{aligned} V_1 &= 4 \text{ ft} \\ V_2 &= 1.5 \text{ ft} \\ V_T &= V_1 + V_2 = 4 + 1.5 = 5.5 \text{ ft} \\ H_1 &= 2 \text{ ft} \\ H_2 &= 1 \text{ ft} \\ H_3 &= 1 \text{ ft} \\ H_4 &= 1.5 \text{ ft} \\ H_R &= H_1 + H_2 + H_3 + H_4 = 2 + 1 + 1 + 1.5 = 5.5 \text{ ft} \\ H_O &= .03(\text{four } 90^\circ \text{ elbows} - 90^\circ) = .03(360^\circ - 90^\circ) = 8.1 \text{ ft} \\ H_T &= H_R + H_O = 5.5 + 8.1 = 13.6 \text{ ft} \\ H_T + V_T &= 13.6 + 5.5 = 19.1 \text{ ft} \end{aligned}$$

Formula 1: $H_T \leq 4.2 V_T$
 $4.2 V_T = 4.2 \times 5.5 = 23.1$
 $13.6 \leq 23.1$

Formula 2: $H_T + V_T \leq 24.75$ feet
 $19.1 \leq 24.75$

Since both formulas are met, this vent configuration is acceptable.

REAR EXIT / HORIZONTAL TERMINATION

$(H_T) \leq (V_T)$

Simple venting configuration
(only two 90° elbows)

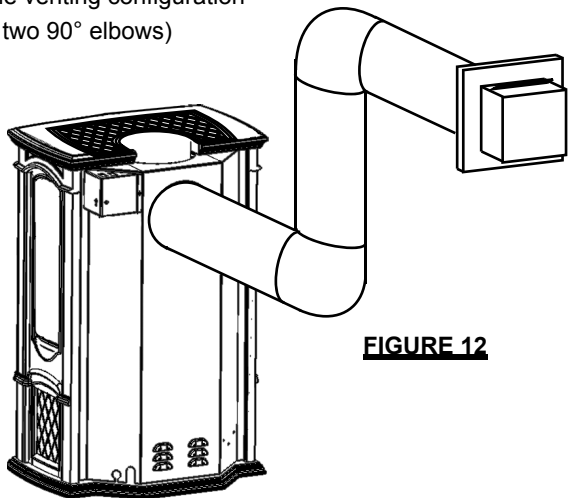


FIGURE 12

Example 4:

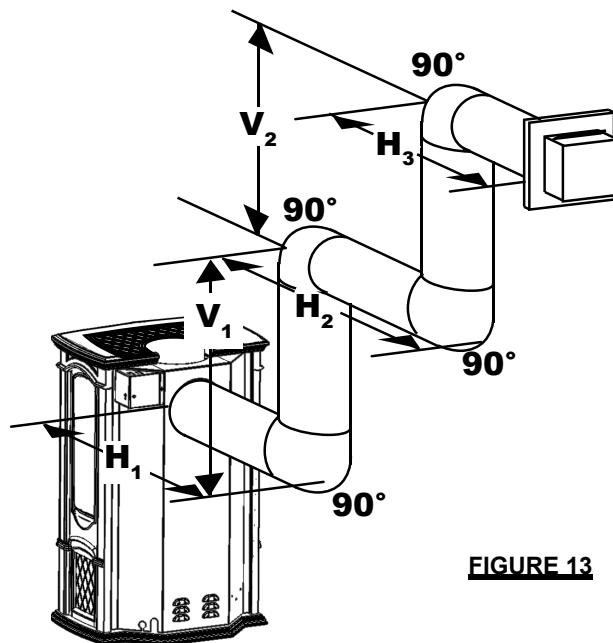
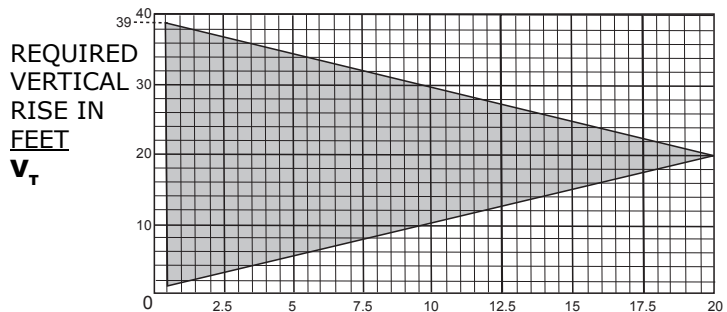


FIGURE 13

See graph to determine the required vertical rise V_T for the required horizontal run H_T



HORIZONTAL VENT RUN PLUS OFFSETS IN FEET H_T

The shaded area within the lines represents acceptable values for H_T and V_T .

- V_1 = 9 ft
- V_2 = 6 ft
- V_T = $V_1 + V_2 = 9 + 6 = 15$ ft
- H_1 = 3 ft
- H_2 = 2 ft
- H_3 = 1.5 ft
- H_R = $H_1 + H_2 + H_3 = 3 + 2 + 1.5 = 6.5$ ft
- H_o = $.03(\text{four } 90^\circ \text{ elbows} - 90^\circ)$
- = $.03(90 + 90 + 90 + 90 - 90) = 8.1$ ft
- H_T = $H_R + H_o = 6.5 + 8.1 = 14.6$ ft
- $H_T + V_T = 14.6 + 15 = 29.6$ ft

Formula 1: $H_T \leq V_T$
 $14.6 \leq 15$

Formula 2: $H_T + V_T \leq 40$ feet
 $29.6 \leq 40$

Since both formulas are met, this vent configuration is acceptable.

For vent configurations requiring more than two 90° elbows the following formulas apply:

Formula 1: $H_T \leq V_T$

Formula 2: $H_T + V_T \leq 40$ feet

REAR EXIT / HORIZONTAL TERMINATION

$(H_T) > (V_T)$

Simple venting configuration (only two 90° elbows)

Example 5:

FIGURE 14

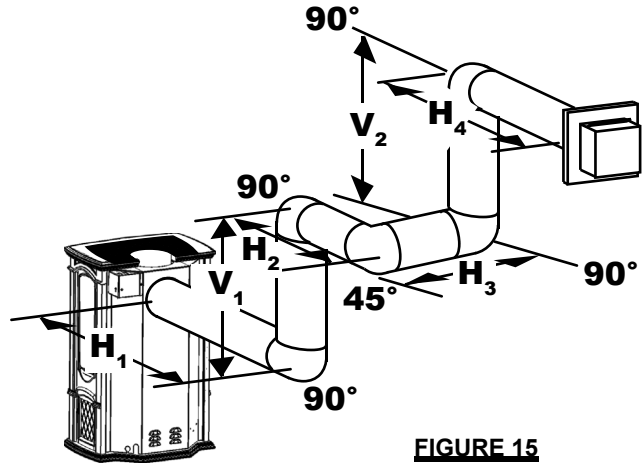
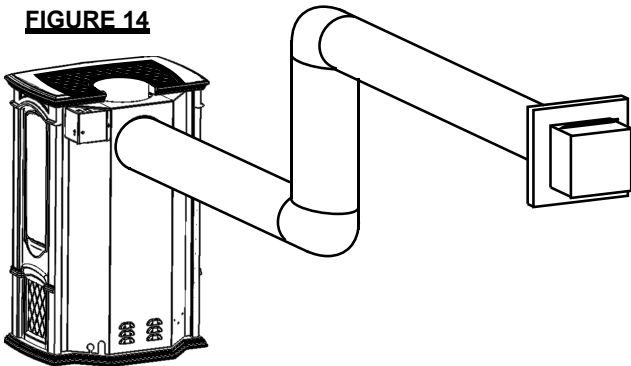
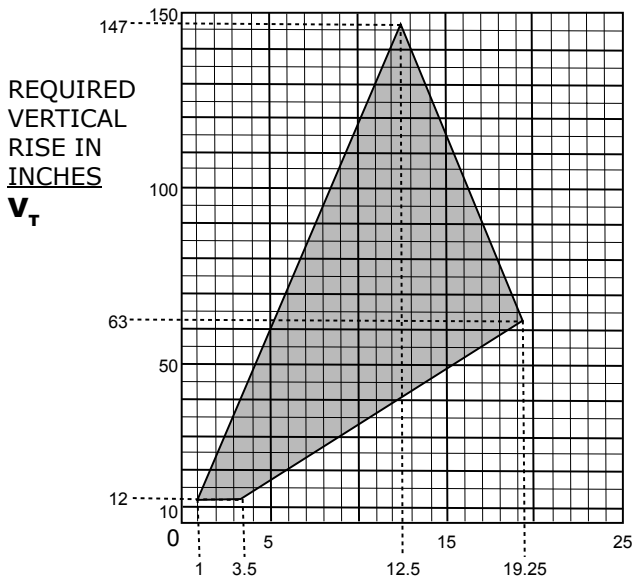


FIGURE 15

See graph to determine the required vertical rise V_T for the required horizontal run H_T



- $V_1 = 4$ ft
- $V_2 = 1.5$ ft
- $V_T = V_1 + V_2 = 4 + 1.5 = 5.5$ ft
- $H_1 = 2$ ft
- $H_2 = 1$ ft
- $H_3 = 1$ ft
- $H_4 = 1.5$ ft
- $H_R = H_1 + H_2 + H_3 + H_4 = 2 + 1 + 1 + 1.5 = 5.5$ ft
- $H_O = .03(\text{four } 90^\circ \text{ elbows} + \text{one } 45^\circ \text{ elbow} - 90^\circ)$
 $= .03(90 + 90 + 90 + 90 + 45 - 90) = 9.45$ ft
- $H_T = H_R + H_O = 5.5 + 9.45 = 14.95$ ft
- $H_T + V_T = 14.95 + 5.5 = 20.45$ ft

Formula 1: $H_T \leq 3.5V_T$
 $3.5V_T = 3.5 \times 5.5 = 19.25$ ft
 $14.95 \leq 19.25$

Formula 2: $H_T + V_T \leq 24.75$ feet
 $20.45 \leq 24.75$

Since both formulas are met, this vent configuration is acceptable.

HORIZONTAL VENT RUN PLUS OFFSETS IN FEET H_T

The shaded area within the lines represents acceptable values for H_T and V_T .

For vent configurations requiring more than two 90° elbows the following formulas apply:

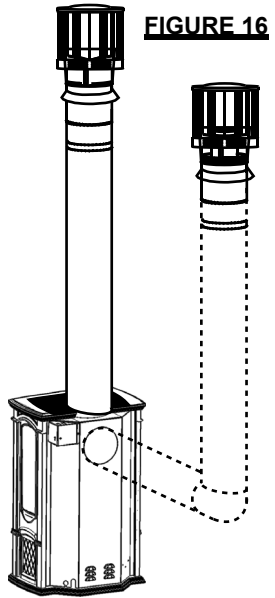
Formula 1: $H_T \leq 3.5V_T$

Formula 2: $H_T + V_T \leq 24.75$ feet

TOP OR REAR EXIT VERTICAL TERMINATION

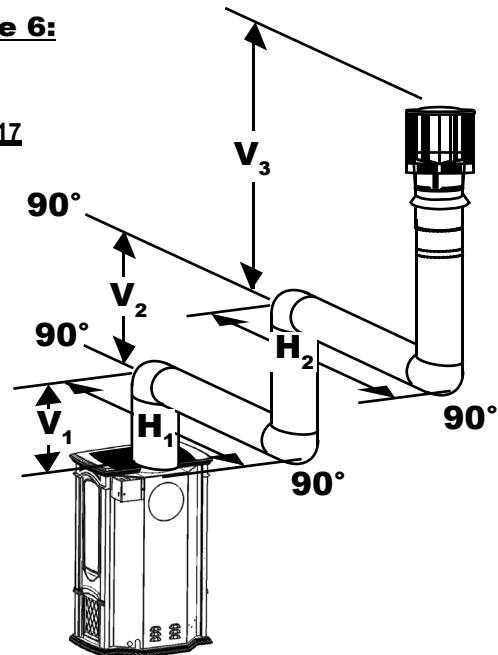
$(H_T) \leq (V_T)$

Simple venting configurations

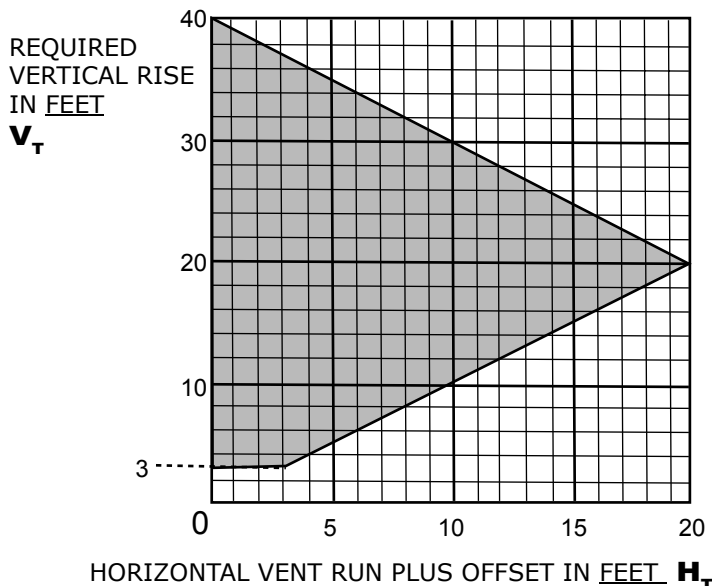


Example 6:

FIGURE 17



See graph to determine the required vertical rise V_T for the required horizontal run H_T .



- V_1 = 5 ft
- V_2 = 6 ft
- V_3 = 10 ft
- V_T = $V_1 + V_2 + V_3 = 5 + 6 + 10 = 21$ ft
- H_1 = 8 ft
- H_2 = 2.5 ft
- H_R = $H_1 + H_2 = 8 + 2.5 = 10.5$ ft
- H_o = .03 (four 90° elbows - 90°)
- = .03 (90 + 90 + 90 + 90 - 90) = 8.1 ft
- H_T = $H_R + H_o = 10.5 + 8.1 = 18.6$ ft
- $H_T + V_T = 18.6 + 21 = 39.6$ ft

Formula 1: $H_T \leq V_T$
 $18.6 \leq 21$

Formula 2: $H_T + V_T \leq 40$ feet
 $39.6 \leq 40$

Since both formulas are met, this vent configuration is acceptable.

The shaded area within the lines represents acceptable values for H_T and V_T .

For vent configurations requiring more than zero 90° elbow (top exit) or one 90° elbow (rear exit), the following formulas apply:

- Formula 1:** $H_T \leq V_T$
- Formula 2:** $H_T + V_T \leq 40$ feet

VERTICAL THROUGH EXISTING CHIMNEY

INSTALLATION

This appliance is designed to be attached to a 3" co-linear flexible vent system running the full length of a masonry chimney.

The flexible vent pipe accommodates any contours of a masonry chimney, however, it is necessary to keep the flexible vent pipe as straight as possible. The inlet air collar of the termination cap must be connected to the air intake pipe.

Use Simpson Duravent Chimney Liner Termination Kit - 923GK (Base plate and Co-Linear to Co-Axial Adaptor). Follow manufacturers (Simpson Dura-Vent) installation instructions.

When installing the unit to this system, Duravent vent components must be used. You must start with a Duravent adaptor, GDS924N, directly off the unit. The GDS924N is only available at your Napoleon® dealer.

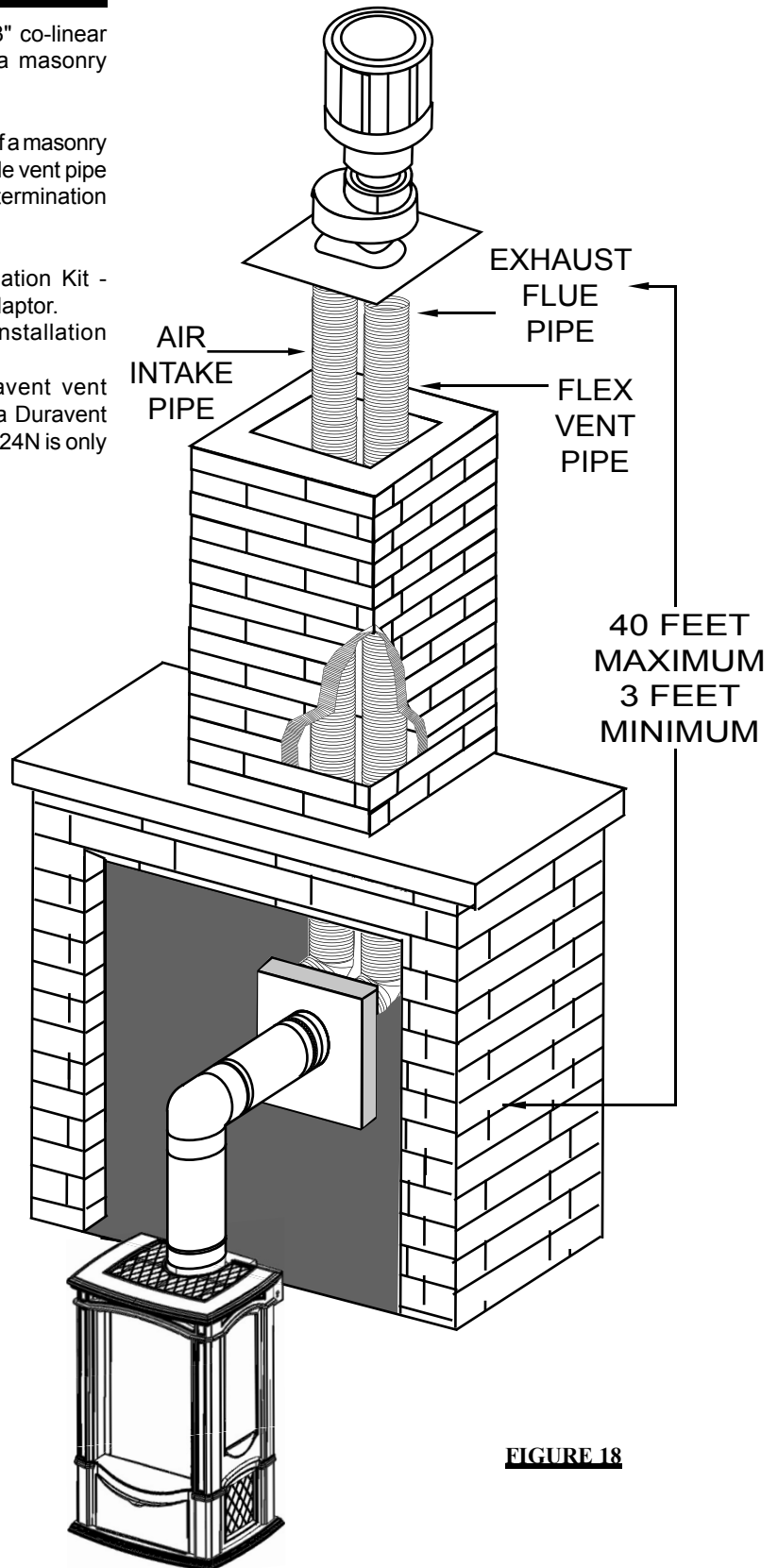
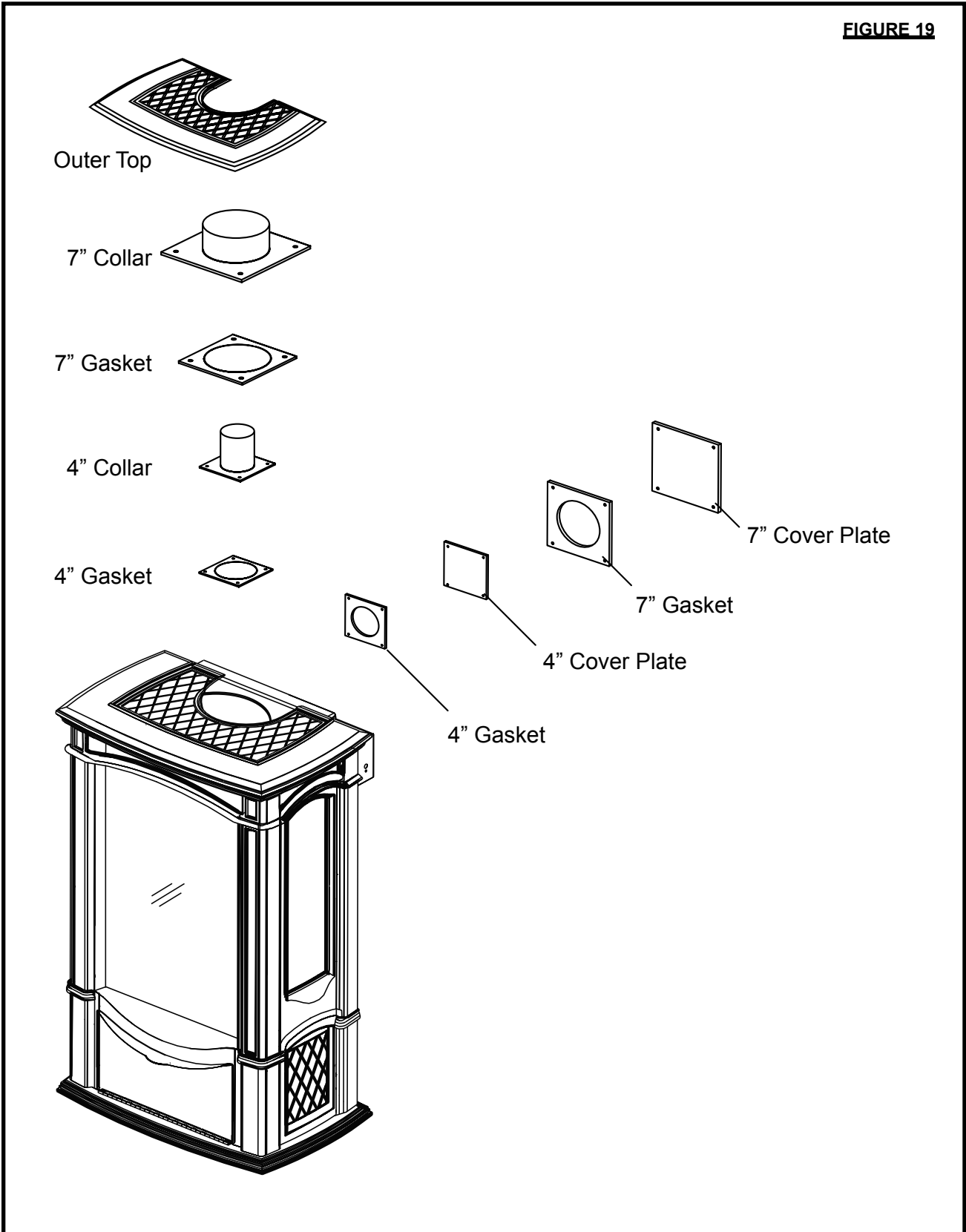


FIGURE 18

REAR EXIT CONVERSION

In order to convert the venting configuration from a *top exit* to a *rear exit*, remove components as illustrated:
When reinstalling in the alternate position: Check gaskets for tears, replace if necessary to ensure a proper seal.



INSTALLATION

WALL AND CEILING PROTECTION

For optimum performance, it is recommended that horizontal runs have a minimum 1" rise per foot when using Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent, or Wolf Steel rigid or flexible vent components.

For safe and proper operation of the stove, follow the venting instructions exactly.

HORIZONTAL INSTALLATION

This application occurs when venting through an exterior wall. Having determined the air terminal location, cut and frame a hole in an exterior wall with a minimum rectangle opening of 10" high x 9" wide. Firestop spacer and shield do not limit the thickness of a wall. For wall construction when using less than 2" x 6" framing, the shield must be cut to suit.

1. Assemble the shield to the spacer as shown, using the 3 shorter screws supplied.

The shield is meant to protect combustible materials within the wall. If the shield is deeper than the combustible portion of the wall, cut to fit.

2. Apply a bead of caulking all around and place the firestop spacer over the framework to restrict cold air from being drawn into the room or around the stove. Ensure that both spacer and shield maintain the required clearance to combustibles. Secure the spacer in place using the 4 longer screws supplied. Once the vent pipe is installed in its final position, apply high temperature sealant W573-0002 (not supplied) between the vent pipe and the firestop spacer.

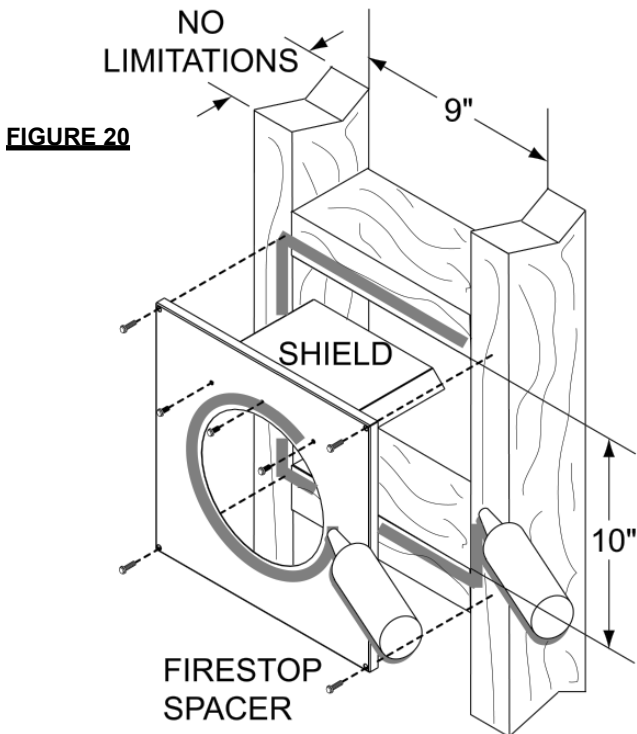


FIGURE 20

VERTICAL INSTALLATION

1. Determine the air terminal location, cut and frame a 9" square opening in the ceiling and the roof to provide the minimum 1" clearance between the vent pipe / liner and any combustible material. Try to center the vent pipe location midway between two joists to prevent having to cut them. Use a plumb bob to line up the center of the openings. **DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL.**

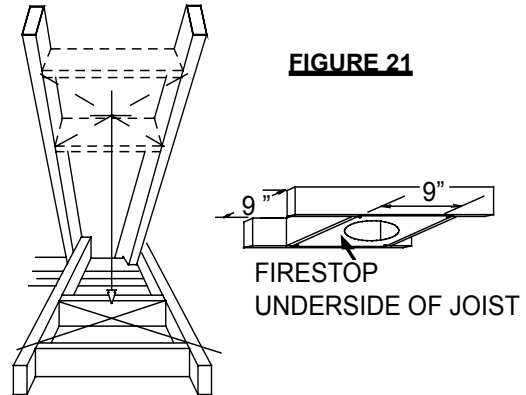


FIGURE 21

A vent pipe shield will prevent any materials such as insulation, from filling up the 1" air space around the vent pipe. Nail headers between the joists for extra support.

2. Apply a bead of caulking (not supplied) to the framework or to the Wolf Steel vent pipe shield plate or equivalent (in the case of a finished ceiling), and secure over the opening in the ceiling. A firestop spacer must be placed on the bottom of each framed opening in a roof or ceiling that the venting system passes through. Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the stove. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe / liner is installed in its final position, apply high temperature sealant W573-0002 (not supplied) between the vent pipe / liner and the firestop assembly.

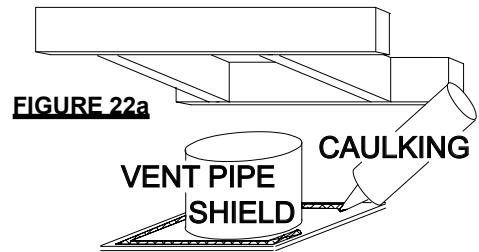


FIGURE 22a

3. In the attic, after the vent pipe has been installed, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the vent pipe.

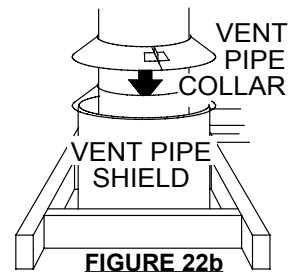


FIGURE 22b

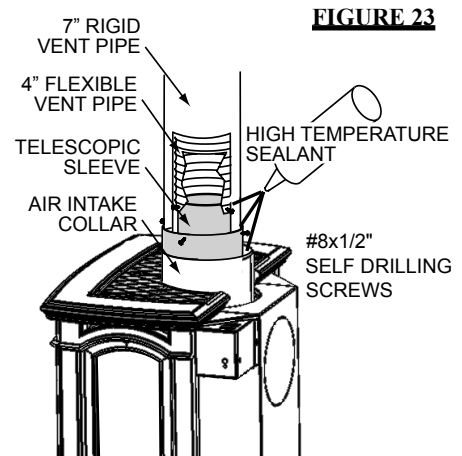
STOVE VENT CONNECTION

1. Attach the telescopic sleeve to the last section of 7" rigid vent pipe. Secure with screws and high temperature sealant W573-0002 (not supplied).

2. Install the 4" flexible vent pipe to the stove. Secure with 3 screws and flat washers. Seal the joint and screw holes using high temperature sealant W573-0007 (not supplied).

3. Run a bead of high temperature sealant W573-0002 (not supplied) around the inside of the air intake collar. Pull the telescopic sleeve a minimum 2" into the air intake collar.

ENSURE THAT THE SEALANT IS NOT VISIBLE ON THE EXTERIOR PIPES ONCE INSTALLATION IS COMPLETED. AN OPTIONAL DECORATIVE BRASS BAND IS AVAILABLE FOR THIS USE. (STANDARD WITH A GD-175 KIT AND GD-176). IN THE EVENT THAT THE VENTING MUST BE DISASSEMBLED, CARE MUST BE TAKEN TO RESEAL THE VENTING.



HORIZONTAL VENTING INSTALLATION

! WARNING

The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use supports or equivalent non-combustible strapping to maintain the 1" clearance from combustibles. Use Wolf Steel Ltd. vent spacers W615-0033 every 18" and at the start, middle and end of each elbow to maintain the minimum 1 1/4" clearance between the 4" flexible vent pipe and the 7" rigid vent pipe. These spacers must not be removed. Use Wolf Steel Ltd. support ring assembly W010-0370 or equivalent non-combustible strapping to maintain the minimum clearance to combustibles for both vertical and horizontal runs.

All 4" flexible vent pipe and 7" rigid vent pipe joints must be sealed using either high temperature sealant W573-0002 (not supplied) or the high temperature sealant W573-0007 Mill Pac (not supplied). However, the high temperature sealant W573-0007 Mill Pac (not supplied) must be used on the joint connecting the 4" flexible vent pipe and the exhaust flue collar.

1. Stretch the 4" flexible vent pipe to the required length taking into account the additional length needed for the finished wall surface. Slip a minimum of 2" of the 4" flexible vent pipe over the inner sleeve of the air terminal. Secure to the inner sleeve using 3 screws. Seal the joint and screw heads using the high temperature sealant W573-0002 (not supplied).

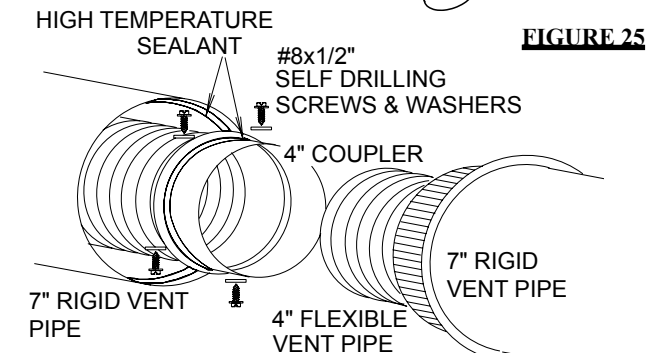
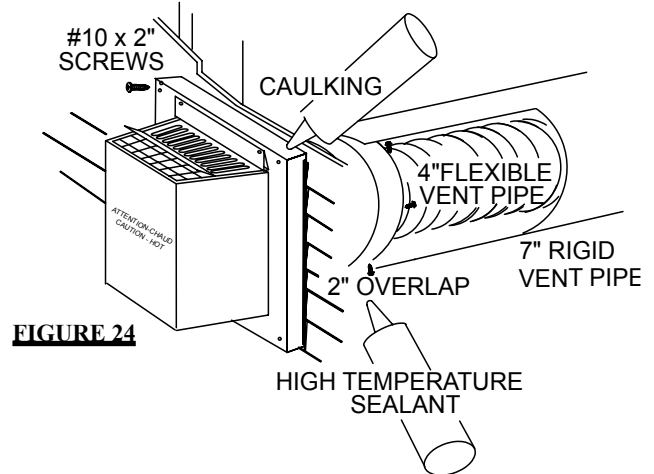
NOTE: If using pipe clamps to connect vent components, 3 screws must also be used to ensure the connection cannot slip off.

2. Slip the first section of 7" rigid vent pipe a minimum of 2" over the outer sleeve of the air terminal. Secure to the outer sleeve using 3 screws. Seal the joint and screw heads using high temperature sealant W573-0002 (not supplied).

3. Insert the vent pipe through the firestop / vent pipe shield. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall. Make weather tight by sealing with caulking (not supplied).

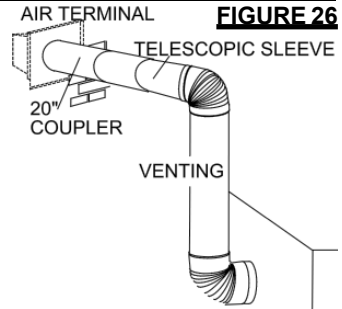
4. If more than one length of vent pipe needs to be used to reach the stove, couple them together as illustrated in **FIGURE 25**. Seal the joints using the same procedure as described above.

The air terminal mounting plate may be recessed into the exterior wall or siding by 1/2", the depth of the return flange.



EXTENDED HORIZONTAL AND CORNER AIR TERMINAL INSTALLATION

1. Follow the instructions for "Horizontal Air Terminal Installations", items 1 to 3.
2. Continue adding components alternating flexible and rigid vent pipes. Ensure that all 4" flexible vent pipes and elbows have sufficient vent spacers attached and each component is securely fastened to the one prior. Attach the 4" telescopic sleeve to the vent run. Repeat using a 7" telescopic sleeve. Secure and seal as before. To facilitate completion, attach 4" and 7" couplers to the air terminal.
3. Install the air terminal. See item 3 of the Horizontal Air Terminal Installation. Extend the 4" telescopic sleeve; connect to the air terminal assembly. Fasten with self tapping screws and seal. Repeat using the 7" telescopic sleeve.



VERTICAL VENTING INSTALLATION

1. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.

2. Stretch the 4" flexible vent pipe to the required length. Slip the vent pipe a minimum of 2" over the inner pipe of the air terminal connector and secure with 3 #8 screws. Seal using a heavy bead of the high temperature sealant W573-0002 (not supplied).

NOTE: If using pipe clamps to connect vent components, 3 screws must also be used to ensure the connection cannot slip off.

3. Slip the 7" rigid vent pipe a minimum of 2" over the air terminal connector and secure with 3 #8 screws. Seal using a heavy bead of the high temperature sealant W573-0002 (not supplied).

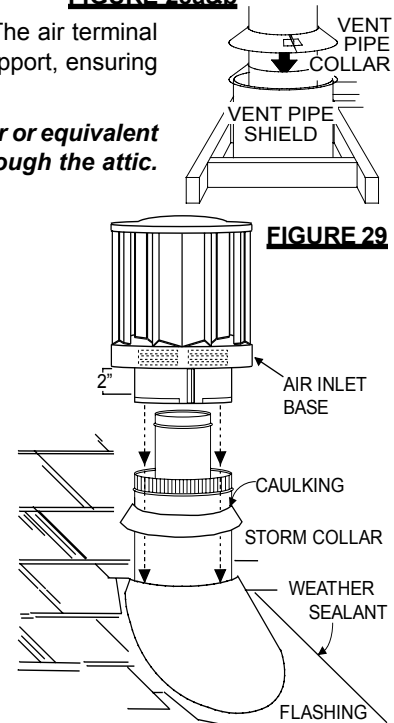
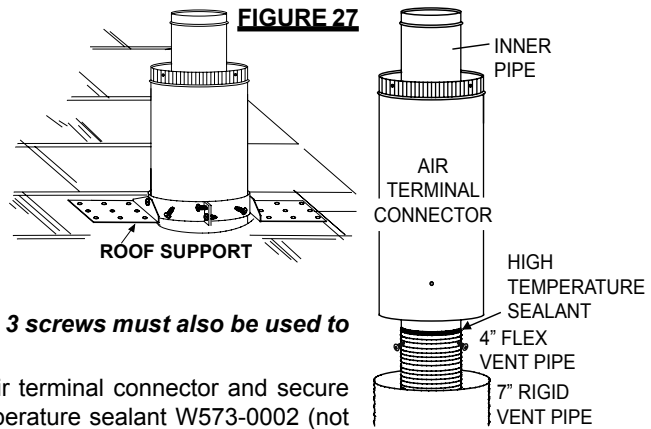
4. Thread the air terminal connector / vent pipe assembly down through the roof. The air terminal must be located vertically and plumb. Attach the air terminal connector to the roof support, ensuring that the top of the air terminal is 16" above the highest point that penetrates the roof.

If the attic space is tight, we recommend threading the Wolf Steel vent pipe collar or equivalent loosely onto the air terminal connector / vent pipe assembly as it is passed through the attic. The air terminal connector must be located vertically and plumb.

5. Remove nails from the shingles, above and to the sides of the chimney. Place the flashing over the air terminal connector leaving a min. 3/4" of the air terminal connector showing above the top of the flashing. Slide the flashing underneath the sides and upper edge of the shingles. Ensure that the air terminal connector is properly centered within the flashing, giving a 3/4" margin all around. Fasten to the roof. Do not nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

6. Aligning the seams of the terminal and air terminal connector, place the terminal over the air terminal connector making sure the inner pipe goes into the hole in the terminal. Secure with the three screws provided.

7. Apply a heavy bead of weatherproof caulking 2" above the flashing. Note: Maintain a minimum 2" space between the air inlet base and the storm collar. Install the storm collar around the air terminal and slide down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved.



RESTRICTING VERTICAL VENTS

Vertical termination installations exiting either from the rear or the top flue collar of the stove may display a very active flame. If this appearance is not desirable, the vent exit must be restricted to reduce the velocity of the exhaust gases, thus slowing down the flame pattern and creating a more traditional gentle appearance. Remove the baffle plate from the rear wall of the firebox, exposing the flue gas outlet opening. Superimpose this outlet hole with the smaller hole on the kit restrictor plate. Secure with the two screws provided and replace the baffle plate.

FIGURE 30

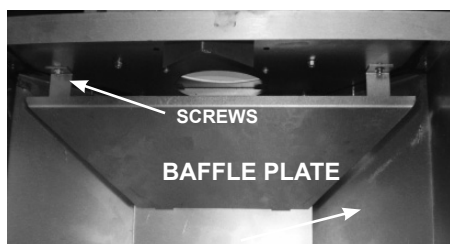


FIGURE 31



1. Remove the front and the door from the stove.
2. Remove the screws securing the baffle plate. **Figure 31.**
Note: The baffle rests on two screws that are attached to the back of the firebox.
3. Using the screws supplied, attach the restrictor plate as show in **Figure 31**.
4. Replace the baffle.

MOBILE HOME INSTALLATION

This appliance is certified to be installed as an OEM (Original Equipment Manufacturer) installation in a manufactured home or mobile home and must be installed in accordance with the manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States or the Mobile Home Standard, CAN/CSA Z240 MH Series, in Canada. This appliance is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the mobile home appliance.

This Mobile/Manufactured Home Listed appliance comes factory equipped with a means to secure the unit. The stove is equipped with two 1/4" diameter holes located in the front left and right corners of the base. For mobile home installations, the stove must be fastened in place. Use #10 hex head screws, inserted through the holes in the base to secure. Always turn off the pilot and the fuel supply at the source, prior to moving the mobile home. After moving the mobile home and prior to lighting the stove, ensure that the logs are positioned correctly.

This appliance is certified to be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes.
This stove is only for use with the type of gas indicated on the rating plate. This stove is not convertible for use with other gases, unless a certified kit is used.

Conversion Kits

The mobile home appliance is field convertible between Natural Gas (NG) and Propane (LP).
To convert from one gas to another consult your Napoleon® dealer/distributor.

GAS INSTALLATION

Proceed once the vent installation is complete.

1. Move the stove into position and secure to the floor through the 1/4" holes located at either side of the base.
2. The stove is designed to accept 3/8" gas supply line. The stove is equipped with a 3/8" manual shut-off valve and flexible connector. Do not kink flexible connector.
3. Connect the gas supply in accordance to local codes. In the absence thereof, install according to the National Installation Code.
4. When flexing any gas line, support the gas valve so that the lines are not bent or kinked.
5. Check for gas leaks by brushing on a soap and water solution.

DO NOT USE OPEN FLAME.

Purge all gas lines with the glass door of the stove removed. Assure that a continuous gas flow is at the burner before re-installing the door.

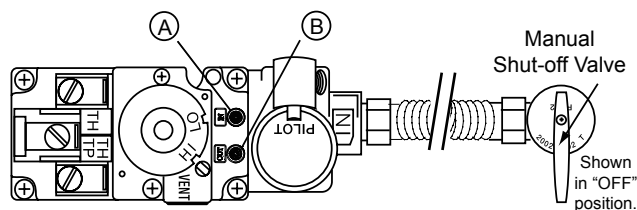


FIGURE 32

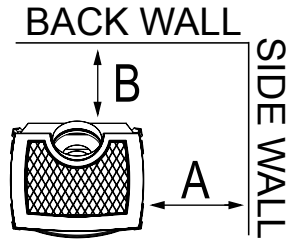
Supply pressure can be checked by turning screw (A) counter-clockwise until loosened and then placing pressure gauge tubing over the test point. Gauge should read 7" (minimum 4.5") water column for natural gas or 13" (11" minimum) water column for propane. Check that main burner is operating on "HI".

Manifold pressure can be checked the same as above using screw (B). Gauge should read 3.5" water column for natural gas or 10" water column for propane. Check that main burner is operating on "HI".

AFTER TAKING PRESSURE READINGS, TIGHTEN SCREWS FIRMLY TO SEAL. DO NOT OVERTORQUE. LEAK TEST

MINIMUM CLEARANCES TO COMBUSTIBLES

Minimum clearance to combustible construction from stove and vent surfaces:



- A - 2"
- B - 5"
- C - 2"

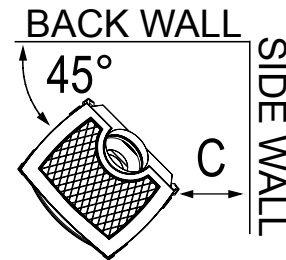
- 1" to bottom and sides of the vent pipe*
- 2" to top of the vent pipe*

Rear Exit

- 47 1/2" to ceiling from base of the unit

Top Exit

- 51" to ceiling from base of the unit



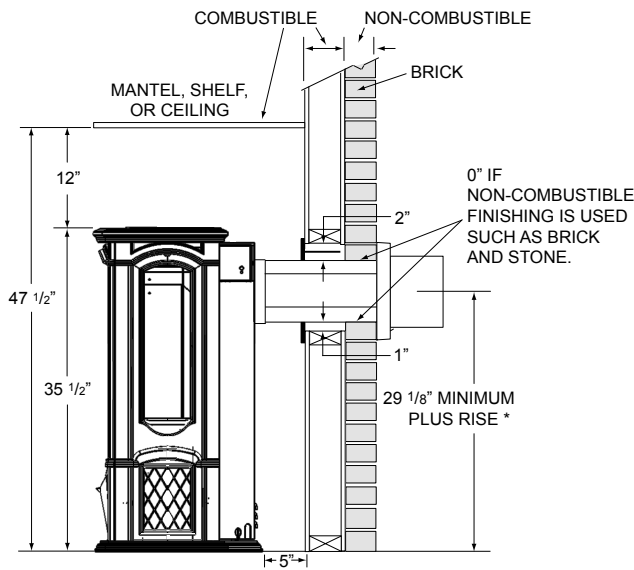
*** HORIZONTAL VENT SECTIONS:** A minimum clearance of 1" at the bottom and sides and 2" at the top of the vent pipe in all horizontal runs to combustibles is required. Use firestop spacer W010-1313 and shield W585-0240 (supplied).

*** VERTICAL VENT SECTIONS:** A minimum of 1" all around the vent pipe on all vertical runs to combustibles is required. Use firestop spacer W010-1313 (supplied).

MINIMUM MANTEL, SHELF OR CEILING CLEARANCES

REAR EXIT

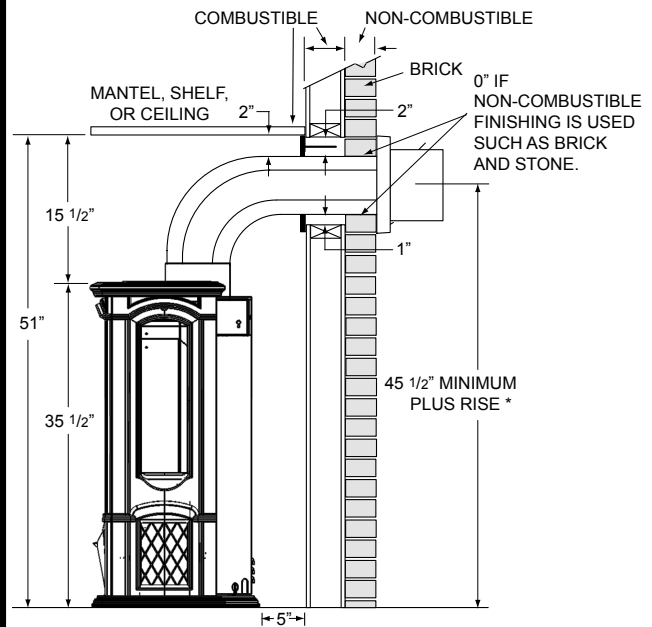
FIGURE 34



The stove requires a minimum ceiling height of 47 1/2" for a rear vent. For temperature requirements, the space around and above the stove must be left unobstructed.

TOP EXIT

FIGURE 35



The stove requires a minimum ceiling height of 51" for a top vent. For temperature requirements, the space around and above the stove must be left unobstructed.

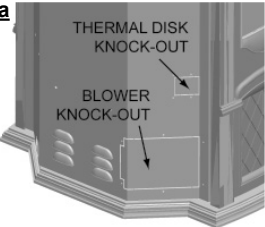
BLOWER INSTALLATION

ELECTRICAL INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER and must be connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the current ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States.

! WARNING

This unit is equipped with a three prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle. Do not cut or remove the grounding prong from this plug.

FIGURE 37a



1. Break out the blower and thermal disk knock-outs from the rear panel. **Figure 37a**
2. Fish the wire extension through the blower knock-out as shown and connect to the prongs on the thermodisc. **Figure 37b**

3. Ensure the thermodisc is touching the wall of the firebox. Secure the thermal disk assembly to the rear panel using 4 of # 8 screws supplied. **Figure 37b**
4. Connect the variable speed switch to the jumper wire (installed in the stove) located just inside the larger knock out area. **Figure 37b**
5. Insert the blower assembly into the rear panel and secure using the remaining #8 screws supplied.

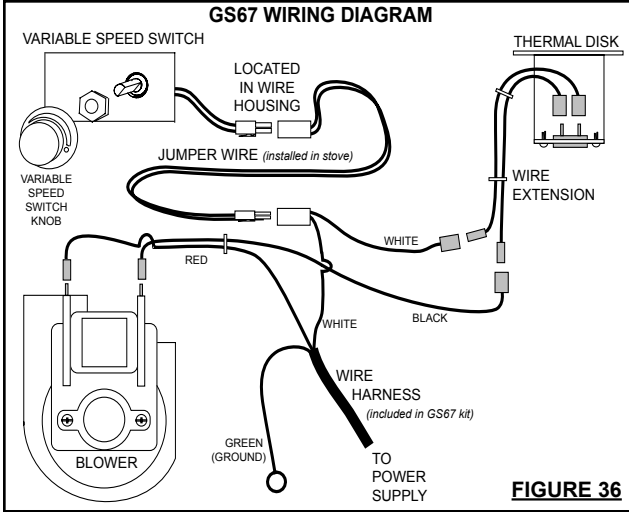


FIGURE 36

6. Remove the switch housing, connect the variable speed switch to the jumper wire and mount the switch to the side of the housing. Attach and secure the variable speed switch using the nut provided. Reinstall the switch housing. Install the variable speed switch knob.

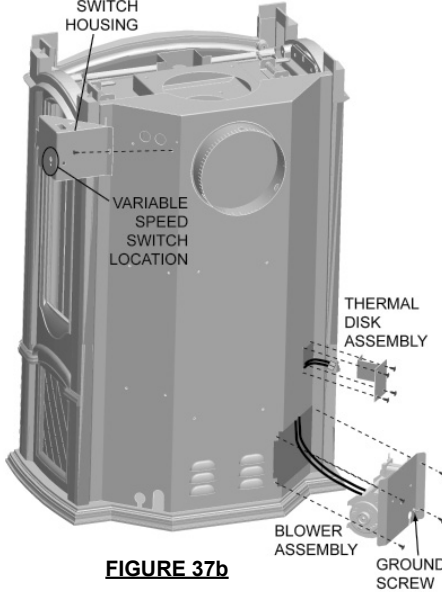


FIGURE 37b

NIGHT LIGHT™ REPLACEMENT

BULB REPLACEMENT

The GDS26 comes equipped with our "Night Light™". If in the event the lamp or lens needs to be replaced, follow these instructions.

1. Turn off all electrical supply.
2. Remove the front and door from the firebox.
3. Unscrew the lens cover making sure the washer stays in place.

Note: Do not handle the lamp (bulb) with bare fingers, protect with a clean dry cloth.

4. The lamp will pull straight out of the socket. Replace with Wolf Steel Ltd. parts only (W387-0006), as lamp and lens are special "high temperature" products.
5. Replace lens with gasket, lense covers, attach wires to quick connects and replace the door when finished.

THE FIREBOX MUST BE SEALED.



FIGURE 38

When re-assembling the light assembly, care must be taken. "Light Leakage" from above the cast doors may be noticed. The holes in the lamp housing are necessary for ventilation and must not be covered.

LENS ASSEMBLY INSTALLATION

1. Remove the door from the firebox.
2. Run the wires up through the lens hole.
3. Align key hole with lens assembly.
4. Snap into place.
5. Replace light shields, attach the wires and replace the door to the firebox.

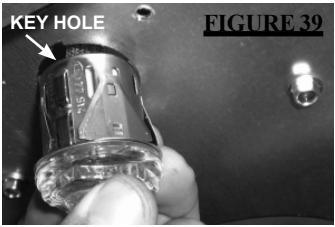


FIGURE 39

LENS ASSEMBLY REPLACEMENT

1. Remove the front door and top shield from the firebox.
2. Compress the retainer fins in with a screw driver while pressing firmly on the top of the light assembly.
3. Once all the retainer fins are pushed in the lens assembly will snap out of place.

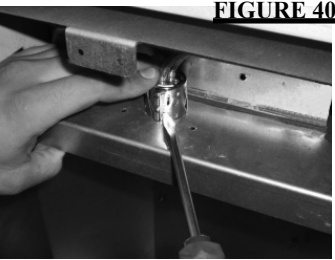
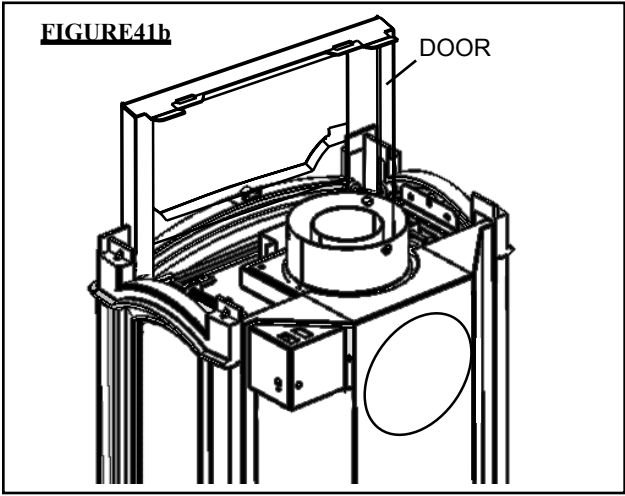
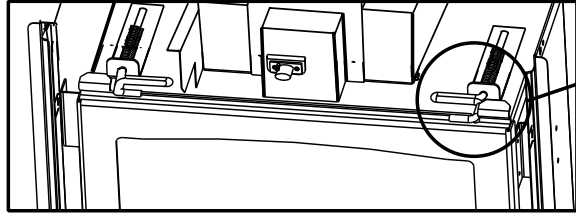
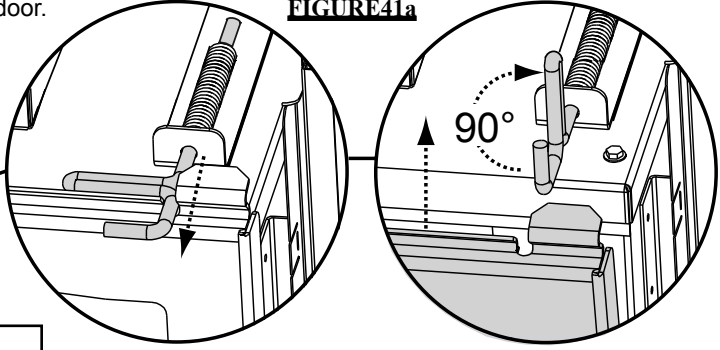


FIGURE 40

FINISHING

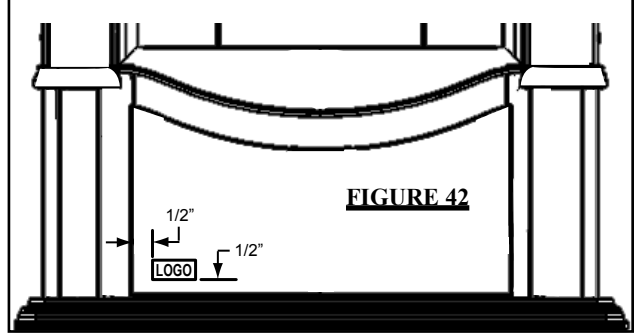
GLASS DOOR INSTALLATION AND REMOVAL

1. Lift the top cast piece off of the unit.
 2. Pull handle forward and rotate 90° to unlatch the door.
- Figure 41a.**
3. Lift door straight up to remove. **Figure 41b.**



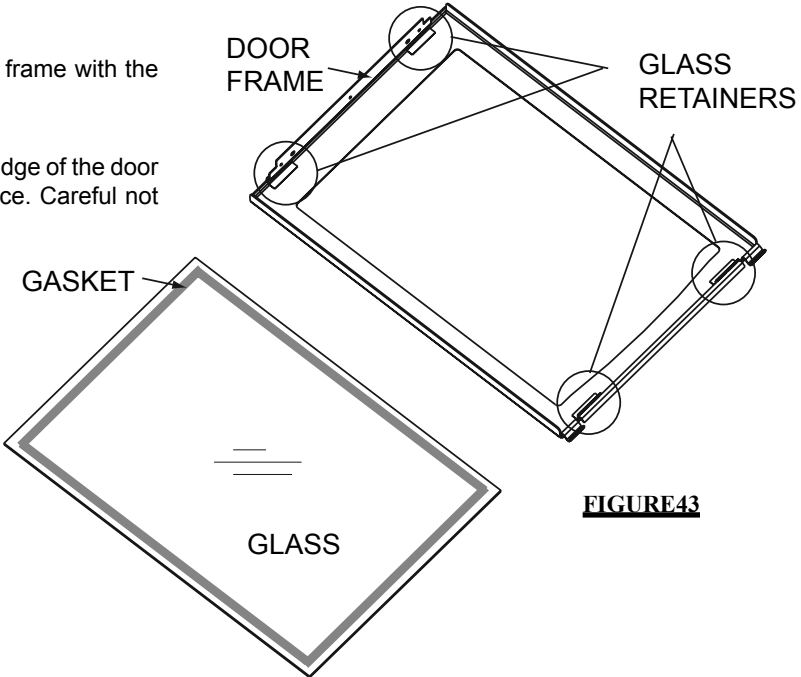
LOGO PLACEMENT

Remove the backing from the logo and position onto the control door as shown.



DOOR GLASS REPLACEMENT

1. Place the door frame face down careful not to scratch the paint.
2. Center the gasketed glass inside the door frame with the thick side of the gasket facing up.
3. Bend the glass retainers located along the edge of the door frame over the gasket holding the glass in place. Careful not to break the glass.



NOTE: Care must be taken when removing and disposing of any broken glass or damaged components. Be sure to vacuum up any broken glass from inside the stove before operation.

SWITCH FUNCTIONS

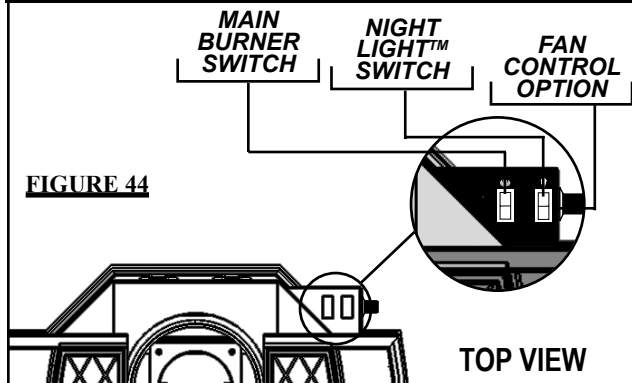


FIGURE 44

MAIN BURNER SWITCH

This switch turns the Main Burner on and off.

NIGHT LIGHT™ SWITCH

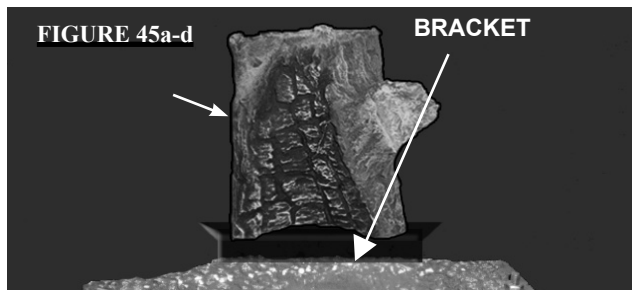
This switch turns the Night Light™ on and off.

FAN CONTROL OPTION

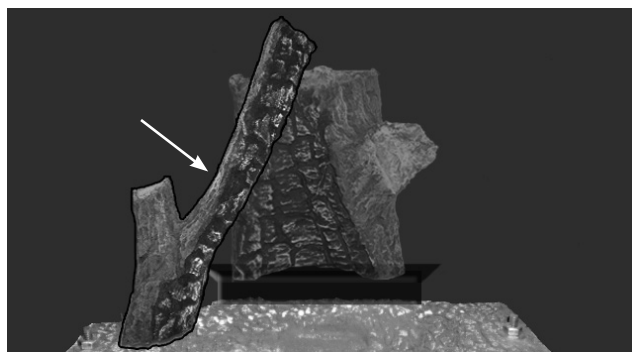
If installed this switch will turn on and off the power to the blower and control the fan speed. There is also a thermally activated switch that will only let the blower come on once the unit has reached a comfortable temperature.

LOG PLACEMENT

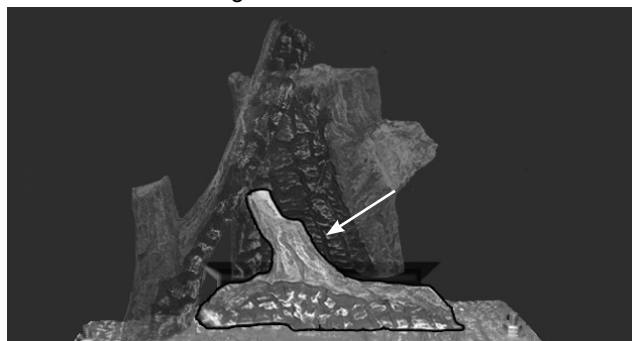
In order to assemble the log set, the glass door must be removed, see *Glass Door Installation and Removal* in the **FINISHING** section of this manual.



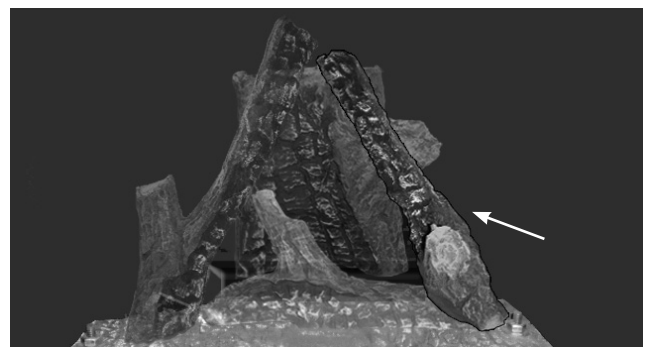
1. Place the rear log as shown, ensuring the holes on the underside are placed onto the 2 pins of the log support.



2. Place the left log as shown, ensuring the hole on the underside is placed onto the burner pin. This will rest on the left side of the rear log.



3. Place the center log as shown, ensuring the holes on the underside are placed onto the two center pins.



4. Place the hole in the underside of the right log onto the locating pin, on the burner base and rests against the rear log as shown.

5. Re-install the glass door.

CHARCOAL EMBERS

Randomly place the charcoal embers along the front and sides of the burner in a realistic manner. Fine dust found in the bottom of the bag should not be used.

VERMICULITE

Sprinkle vermiculite around the charcoal embers.

Note: Both charcoal embers and vermiculite are not to be placed on the burner ports.

GLOWING EMBERS

Tear the embers into pieces and place along the burner ports covering all of the burner. Care should be taken to shred the embers into thin, small irregular pieces as only the exposed edges of the fibre hairs will glow. The ember material will only glow when exposed to direct flame; however, care should be taken to not block the burner ports.

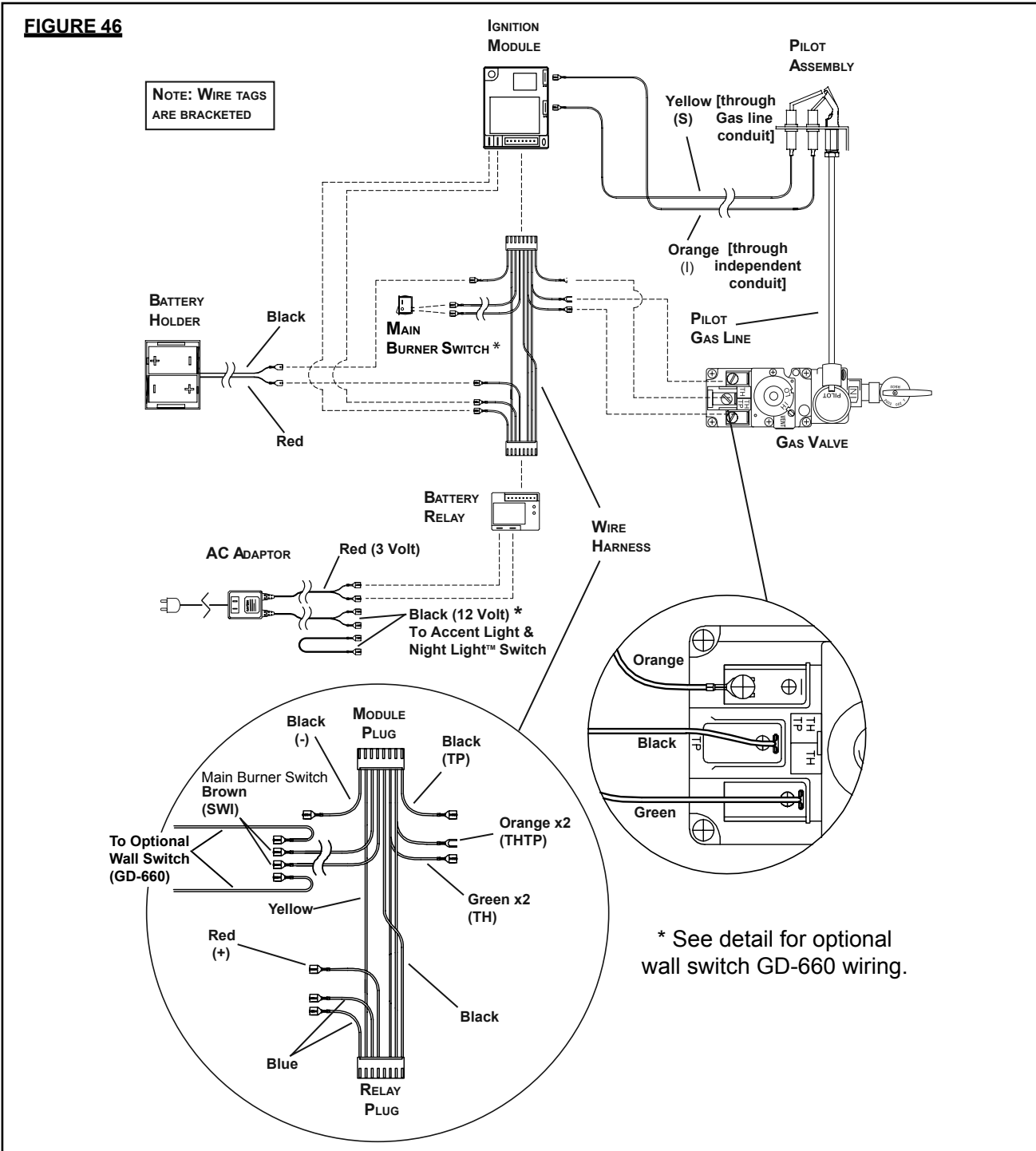
Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition. Phazer™ logs glow when exposed to direct flame. Use only certified "glowing embers" and Phazer™ logs available from your Napoleon® dealer.

WIRING DIAGRAM

The main burner on/off switch and Night Light™ switch is located behind lower access panel. For ease of accessibility, optional remote wall switches may be installed in a convenient location for both burner and light operation. The recommended maximum lead length depends on wire size:

WIRE SIZE	MAX. LENGTH
14 gauge	100 feet
16 gauge	60 feet
18 gauge	40 feet

Route 2-strand (solid core) wire through the electrical hole located at the bottom left side of the unit. Connect the wires from the wall switch to the two corresponding spade connectors on the back of the on/off switches located behind the lower access panel.





OPERATION / MAINTENANCE

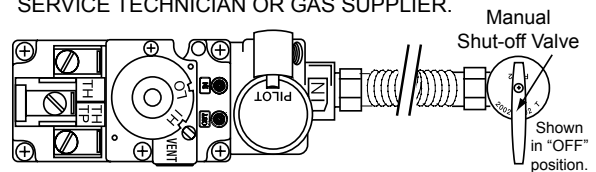
FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.


- | | |
|--|---|
| <p>A. THIS STOVE IS EQUIPPED WITH AN IGNITION DEVICE WHICH AUTOMATICALLY LIGHTS THE PILOT. DO NOT TRY TO LIGHT BY HAND.</p> <p>B. BEFORE OPERATING SMELL ALL AROUND THE STOVE AREA FOR GAS AND NEXT TO THE FLOOR BECAUSE SOME GAS IS HEAVIER THAN AIR AND WILL SETTLE ON THE FLOOR.</p> <p>C. USE ONLY YOUR HAND TO TURN THE GAS CONTROL KNOB. NEVER USE TOOLS. IF THE KNOB WILL NOT TURN BY HAND, DO NOT TRY TO REPAIR IT. CALL A QUALIFIED SERVICE TECHNICIAN. FORCE OR ATTEMPTED REPAIR MAY RESULT IN A FIRE OR EXPLOSION.</p> <p>D. DO NOT USE THIS STOVE IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE STOVE AND</p> | <p>REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER.</p> <p>WHAT TO DO IF YOU SMELL GAS:</p> <ul style="list-style-type: none"> • TURN OFF ALL GAS TO THE STOVE. • OPEN WINDOWS. • DO NOT TRY TO LIGHT ANY APPLIANCE. • DO NOT TOUCH ANY ELECTRIC SWITCH; DO NOT USE ANY PHONE IN YOUR BUILDING. • IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOUR'S PHONE FOLLOW THE GAS SUPPLIER'S INSTRUCTIONS. • IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT. |
|--|---|

OPERATING INSTRUCTIONS

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. STOP! READ THE ABOVE SAFETY INFORMATION ON THIS LABEL. 2. TURN REMOTE WALL SWITCH TO OFF POSITION. 3. TURN OFF ALL ELECTRIC POWER TO THE STOVE AND REMOVE BATTERIES. 4. THIS STOVE IS EQUIPPED WITH AN IGNITION DEVICE WHICH AUTOMATICALLY LIGHTS THE PILOT. DO NOT TRY TO LIGHT THE PILOT BY HAND. 5. TURN MANUAL SHUTOFF VALVE CLOCKWISE  TO OFF. 6. OPEN THE GLASS DOOR. 7. WAIT FIVE (5) MINUTES TO CLEAR OUT ANY GAS. IF YOU SMELL GAS INCLUDING NEAR THE FLOOR, STOP! | <p>FOLLOW "B" IN THE ABOVE SAFETY INFORMATION ON THIS LABEL. IF YOU DON'T SMELL GAS GO TO THE NEXT STEP.</p> <ol style="list-style-type: none"> 8. CLOSE THE GLASS DOOR. 9. TURN MANUAL SHUTOFF VALVE COUNTER-CLOCKWISE  TO ON. 10. TURN ON ALL ELECTRIC POWER TO THE STOVE AND RE-INSTALL BATTERIES. 11. TURN ON REMOTE WALL SWITCH TO ON POSITION. 12. IF STOVE WILL NOT OPERATE, FOLLOW INSTRUCTIONS "TO TURN OFF GAS" AND CALL YOUR SERVICE TECHNICIAN OR GAS SUPPLIER. |
|---|--|



TO TURN OFF GAS

1. TURN OFF REMOTE WALL SWITCH TO THE STOVE.
2. TURN OFF ALL ELECTRICAL POWER TO THE STOVE IF SERVICE IS TO BE PERFORMED.
3. TURN MANUAL SHUTOFF VALVE CLOCKWISE  TO OFF. DO NOT FORCE.

MAINTENANCE

TURN OFF THE GAS AND UNPLUG ELECTRICAL POWER BEFORE SERVICING THE STOVE:

Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This stove and its venting system should be inspected before use and at least annually by a qualified service person. The stove area must be kept clear and free of combustible materials, gasoline or other flammable vapours and liquids. The flow of combustion and ventilation air must not be obstructed.

1. In order to properly clean the burner and pilot assembly, remove the logs exposing both assemblies.
2. Keep the control compartment, logs, burner, air shutter opening and the area surrounding the logs clean by

vacuuming or brushing, at least once a year.

3. Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.
4. Check to see that the pilot flames are large enough to engulf the sensor on one leg and reaches toward the burner on the other leg.
5. Replace the cleaned logs.
6. Check to see that the main burner ignites completely on all openings when the gas knob for the burner is turned on. A 5-10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon® dealer/distributor.
7. Check that the door gasketing is not broken or missing.

ADJUSTMENTS

PILOT INJECTOR AND ORIFICE REPLACEMENT

1. Turn off the electrical and gas supply to the stove.
2. Remove the cast front, glass viewing door and log set.
3. Remove the 2 securing screws. Slide the burner assembly to the right and lift out.
4. Using a deep $\frac{9}{16}$ " socket wrench, remove the main burner orifice. A $\frac{7}{8}$ " back-up wrench must be used on the manifold, located below the housing to ensure that the aluminum tubing does not twist or kink. Replace the correct burner orifice using pipe thread compound.
5. Loosen nut and replace with appropriate injector
6. Reinstall the burner ensuring that the Venturi tube fits over the orifice.

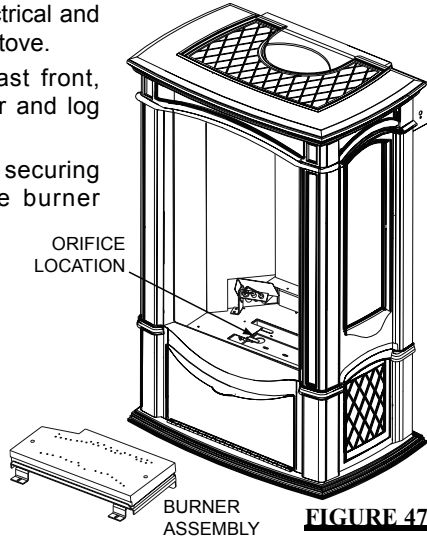


FIGURE 47

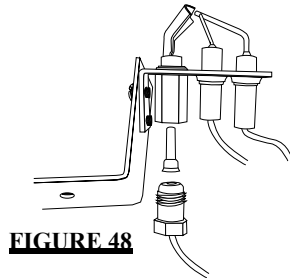


FIGURE 48

NOTE: Check and adjust, if necessary, the primary air to $\frac{7}{16}$ " for propane and $\frac{1}{4}$ " for natural gas. Replace the screws.

7. Turn on the gas supply and check for gas leaks by brushing on a soap and water solution.

Do not use open flame.

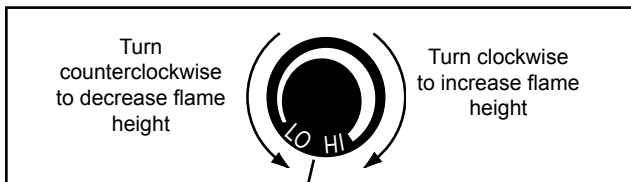
8. Replace the log set. Then light the pilot and main burner to ensure that the gas lines have been purged.

9. Replace the glass viewing door and cast front. Turn on the electrical supply to the stove.

Purge all gas lines with the glass door removed. Assure that a continuous flow is at the burner before re-installing the door.

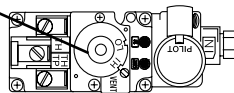
This must be carried out by an AUTHORIZED REPRESENTATIVE OF WOLF STEEL LTD. or a QUALIFIED GAS INSTALLER in accordance with local codes or in the absence of local codes with the requirements of the provincial / state authorities having jurisdiction and in accordance with the requirements of the CAN1-B149 Installation Code in Canada and the ANSI Z223.1 National Fuel Gas Code in the United States.

FLAME ADJUSTMENT AND CHARACTERISTICS



FLAME ADJUSTMENT KNOB

FIGURE 49



It is important to periodically perform a visual check of the pilot and the burner flames. Compare them to the figures below. If any flames appear abnormal call a qualified service person.

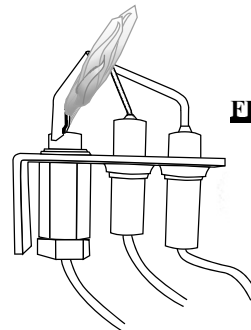


FIGURE 50



VENTURI ADJUSTMENT

Remove the 2 screws securing the burner. Natural gas models have air shutters set to 0.188" open ($\frac{3}{16}$ "). Propane models have air shutters set to 0.375" open ($\frac{3}{8}$ "). After making adjustments replace the burner ensuring that the venturi tube fits over the orifice and replace the screws.

Closing the air shutter will cause a more yellow flame, but can lead to carboning. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.

Air shutter adjustment must only be done by a qualified gas installer!

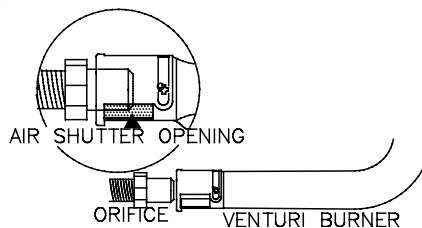


FIGURE 51

REPLACEMENTS

Contact your dealer for questions concerning prices and availability of replacement parts. Normally all parts can be ordered through your Napoleon® dealer or distributor.

When ordering replacement parts always give the following information:

1. MODEL & SERIAL NUMBER OF STOVE
2. INSTALLATION DATE OF STOVE
3. PART NUMBER
4. DESCRIPTION OF PART
5. FINISH



WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specified approved with this appliance may result in property damage or personal injury.

FOR WARRANTY REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.

*** IDENTIFIES ITEMS WHICH ARE NOT ILLUSTRATED. FOR FURTHER INFORMATION, CONTACT YOUR NAPOLEON® DEALER.**

REPLACEMENT PARTS

1	W135-0322	LOG #1- REAR
2	W135-0324	LOG #2 - RIGHT
3	W135-0323	LOG #3 - LEFT
4	W135-0325	LOG #4 - CENTER
5	GL-662	LOG SET
6	W725-0032	DEXEN VALVE - NG
6	W725-0049	DEXEN VALVE - LP
7	W010-1750	BURNER
8	W455-0017	#42 BURNER ORIFICE - NG
8	W455-0059	#53 BURNER ORIFICE - LP
9	W455-0049	PILOT INJECTOR - LP
9	W455-0071	PILOT INJECTOR - NG
10	W720-0092	PILOT TUBE
11	W100-0069	PILOT ASSEMBLY - NG
11	W100-0093	PILOT ASSEMBLY - LP
12*	W385-0334	NAPOLEON® LOGO
13*	W660-0009	ON/OFF SWITCH
14*	W387-0009	HALOGEN BULB 5W
15*	W387-0004	LAMP, 5 WATT 12 VOLT 77.914 GE38-M
16	W135-0292**	CAST FRONT
17	W135-0291**	CAST SIDE (LEFT OR RIGHT) CAST
18	W135-0293**	CAST TOP
19	W225-0294**	CAST CONTROL DOOR
20	W225-0295**	CAST BASE
21	W010-1640	DOOR c/w GLASS AND GASKET
22	W010-1749	GLASS AND GASKET
23	W430-0013	CONTROL DOOR MAGNET
24	W010-1313	FIRESTOP SPACER
25	W585-0240	TOP VENT SHIELD

TERMINAL KITS

GD-175 - WALL TERMINAL KIT

26	BM6790	90° ELBOW - 7" DIAMETER
27	GD-222	TERMINAL ASSEMBLY
28	BM67ADJ	30" TO 53" ADJUSTABLE PIPE - 7" DIA
29	W500-0077	FIRESTOP / WALL PLATE
30*	W020-0032	HARDWARE
31	BR3730	BLACK TRIM COLLAR
32	BM6724	24" STOVE PIPE - 7" DIAMETER
33	W401-0001	10' FLEXIBLE VENT PIPE c/w SPACERS - 4" DIA
34	W025-0003	DECORATIVE METALIC BLACK BAND

GD-180 - PERISCOPE TERMINAL KIT

26	BM6790	90° ELBOW - 7" DIAMETER
35*	GD-201	PERISCOPE
28	BM67ADJ	30" TO 53" ADJUSTABLE PIPE - 7" DIA
29	W500-0077	FIRESTOP / WALL PLATE
30*	W020-0032	HARDWARE
31	BR3730	BLACK TRIM COLLAR
32	BM6724	24" STOVE PIPE - 7" DIAMETER
33	W010-0300	10' FLEXIBLE VENT PIPE c/w SPACERS - 4" DIA
34	W025-0003	DECORATIVE METALIC BLACK BAND

GD177 - TERMINAL VENT KIT

27	GD-222	TERMINAL ASSEMBLY
31	BR3730	BLACK TRIM COLLAR
32	BM6724	24" STOVE PIPE - 7" DIAMETER
33*	W401-0001	10' FLEXIBLE VENT PIPE c/w SPACERS - 4" DIA
36*	W020-0328	HARDWARE

ROOF TERMINAL KITS

GD-110 - 1/12 TO 7/12 PITCH

37	W670-0006	AIR TERMINAL
38	W490-0073	4/7 INNER / OUTER SLEEVE
39	W010-0567	ROOF SUPPORT
40	W170-0063	STORM COLLAR
41	W263-0054	ROOF FLASHING

GD-111 - 8/12 TO 12/12 PITCH

37	W670-0006	AIR TERMINAL
38	W490-0073	4/7 INNER / OUTER SLEEVE
39	W010-0567	ROOF SUPPORT
40	W170-0063	STORM COLLAR
41	W263-0055	ROOF FLASHING

GD-112 - FLAT ROOF

37	W670-0006	AIR TERMINAL
38	W490-0073	4/7 INNER / OUTER SLEEVE
39	W010-0567	ROOF SUPPORT
40	W170-0063	STORM COLLAR
41	W263-0056	ROOF FLASHING

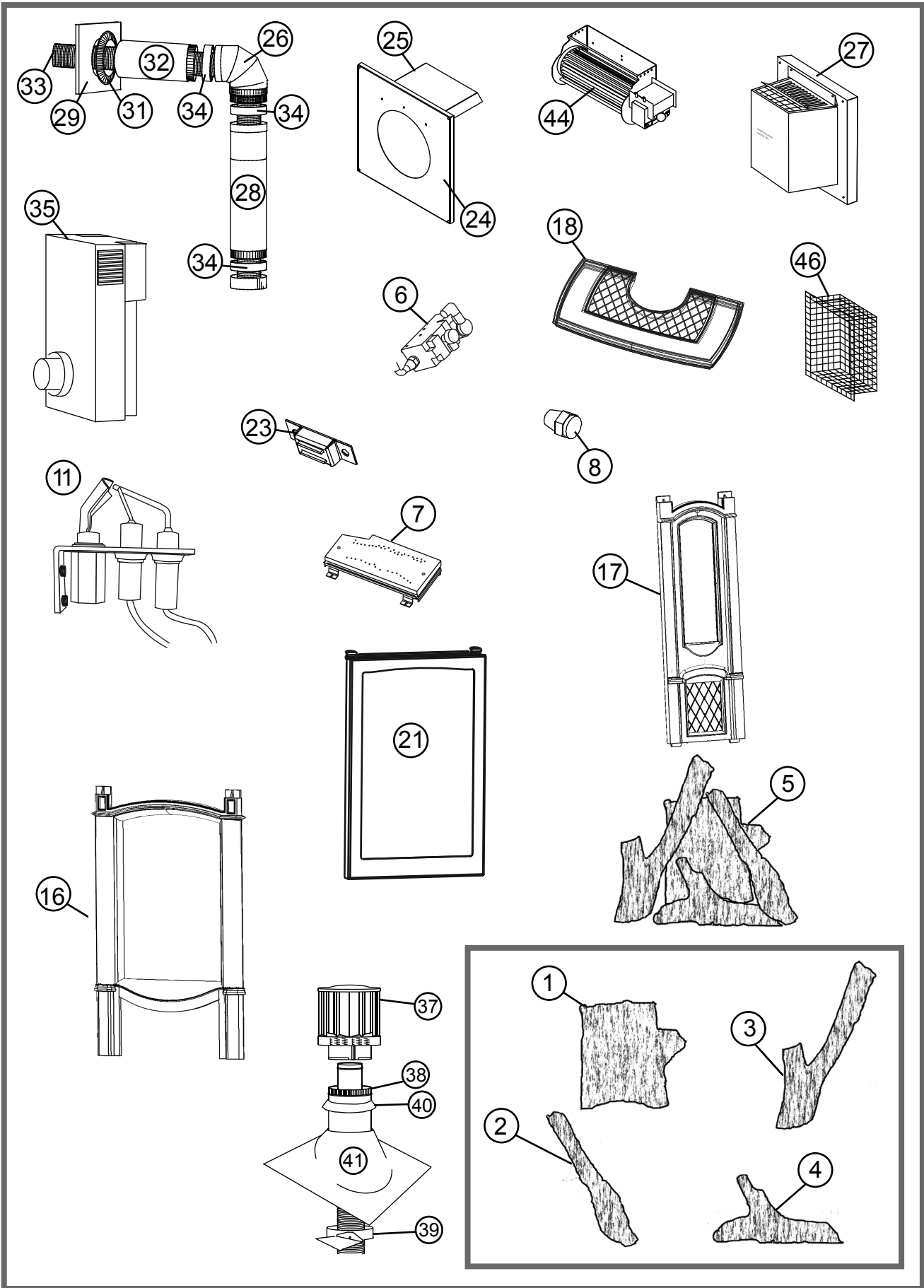
ACCESSORIES

42*	W690-0001	MILLIVOLT THERMOSTAT
43*	W690-0011B	REMOTE CONTROL - ADVANTAGE PLUS
44	GS67	BLOWER KIT
45*	W175-0268	CONVERSION KIT - NG TO LP
45*	W175-0269	CONVERSION KIT - LP TO NG
46	GD-301	HEAT GUARD
47*	W175-0001	4" COUPLER
48*	GS332S	STOVE TOP INSET - SOAPSTONE
48*	GS332F	STOVE TOP INSET - GRANITE - GREEN
48*	GS332N	STOVE TOP INSET - GRANITE - BROWN
49*	GS26S	STOVE SIDE INSET - SOAPSTONE
49*	GS26F	STOVE SIDE INSET - GRANITE - GREEN
49*	GS26N	STOVE SIDE INSET - GRANITE - BROWN
50*	PRP19	PORCELAIN REFLECTIVE RADIANT PANELS
51*	GD839KT	DECORATIVE BRICK/STONE PANELS

UNIT COLOURS

**FOR OTHER AVAILABLE COLOURS, ADD THESE LETTERS TO THE BASE PART NUMBER:

COLOR	LETTER	FINISH
MOSS GREEN	M	PORCELAIN
MAJOLICA BROWN	N	PORCELAIN
CRACKLE WHITE	W	PORCELAIN
WROUGHT IRON	WI	PAINTED

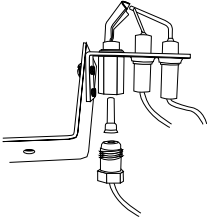


TROUBLE SHOOTING GUIDE

BEFORE ATTEMPTING TO TROUBLESHOOT, PURGE YOUR UNIT AND INITIALLY LIGHT THE PILOT AND THE MAIN BURNER WITH THE GLASS DOOR REMOVED.

SYMPTOM	PROBLEM	TEST SOLUTION
---------	---------	---------------

Pilot will not light.
Makes noise with no spark at pilot burner



	- Wiring	Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the correct terminals (not reverse) on the module and pilot assembly.
	- Loose connection	Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	- Module	Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark the "I" terminal module must be replaced. If there is a spark the "I" terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	- Igniter Spark gap is incorrect	- spark gap of the ignitor to the pilot should be .125" (1/8").

Pilot will not light.
Makes no noise with no spark at pilot burner

	- Transformer	Verify the transformer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts A.C.
	- A shorted or loose Connection	Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	- Improper switch wiring	Troubleshoot the system with a simple ON/OFF switch
	- Module is not grounded	Verify the valve and pilot assemblies are properly grounded to the metal chassis of the stove or log set.
	- Faulty module	Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark the "I" terminal module must be replaced. If there is a spark the "I" terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.

Pilot sparks but will not light - Gas supply

	- Gas supply	Verify that the incoming gas line ball valve is "Open". Verify that the inlet pressure reading is within acceptable limits, inlet pressures must not exceed 14" W.C.
	- Module is not grounded	Verify the valve and pilot assemblies are properly grounded to the metal chassis of the stove or log set.
	- Out of propane gas.	- fill the tank.

Continues to sparks and pilot lights, but main burner will not light

	- Short or loose connection in sensor rod	Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	- Poor flame rectification or contaminated sensor rod	Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. <i>(Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.)</i> The sensor rod may need cleaning.
	- Poor grounding between pilot assembly and gas valve	Verify that the wire harness is firmly connected to module
	- Damaged pilot or dirty sensor rod	Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire. Clean sensor rod with an emory cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot lights Stops sparking / pilot remains lit but burner will not turn on	- Wiring / Connection	Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	- Wiring harness	Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that you have 7 wires and they are connected in the right order.
	- Module or Valve	Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn multimeter to "DC" place the red lead from multimeter on the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "Zero" volts reading does not automatically indicate a bad module, there may be too little resistance in the valve solenoid. Check if the Green wire is disconnected from the valve. The voltage output from the module should be between 2 and 3 volts.
Exhaust fumes smelled in room, headaches.	- Stove is spilling.	Check all seals.
Carbon is being depos- ited on glass, logs or combustion chamber surfaces.	- Air shutter has become blocked	Ensure air shutter opening is free of lint or other obstructions.
	- Flame is impinging on the logs or combustion chamber.	Check that the logs are correctly positioned. Open air shutter to increase the primary air. Check the input rate: check the manifold pressure and orifice size as specified by the rating plate values. Check that the door gasketing is not broken or missing and that the seal is tight. Check that both vent pipes are free of holes and well sealed at all joints. Check that minimum rise per foot has been adhered to for any horizontal venting.
Flames are very ag- gressive.	- Door is ajar	Tighten door clamps
	- Venting action is too great.	Restrict vent exit with restrictor plate. See Restricting Vents.
Main burner flame is a blue, lazy, transparent flame.	- Blockage in vent.	Remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required.
	- Incorrect installation.	Confirm installation with venting parameters.
White / grey film forms.	- Sulphur from fuel is being de- posited on glass, logs or combustion chamber surfaces.	Clean the glass with a recommended gas stove glass cleaner. DO NOT CLEAN GLASS WHEN HOT. If deposits are not cleaned off regularly, the glass may become permanently marked.

